

# What Parents Need To Know About Safe Technology



# Children are more vulnerable to wireless.

- Children have thinner skulls. Research shows that children's developing brains, eyes, skull and bone marrow can absorb wireless radiation three to ten times more intensely than adults.
- The World Health Organization's International Agency for the Research on Cancer classified wireless radio frequency radiation as a Class 2B, Possible Human Carcinogen in 2011. Cell phones are linked to increased brain and thyroid tumors. Risks are highest for those who first used a phone under the age of twenty.
  - A landmark study by the U.S. National Toxicology Program found "clear evidence" of cancer, heart damage and DNA damage in rats exposed to daily wireless.
  - A 2018 study found impacts to the memory of teenagers who used cell phones to the head after just one year. Numerous research studies links wireless exposure to hyperactivity, behavior problems, damaged sperm, and altered brain development.
  - Wireless radiation at very low levels has been shown to change brain activity. In 2011, NIH researchers found brain glucose metabolism increased from cell phone radiation.
  - A Yale Medicine study found increased hyperactivity and memory problems in mice after prenatal cell phone exposure. Now hundreds of doctors and scientists and educators recommend parents reduce their child's cell phone radiation exposure.

### **WORLDWIDE POLICY**

Over 20 countries clearly recommend parents reduce their children's wireless cell phone radiation exposure.

France and Belgium have banned advertising and the sale of cell phones designed for young children.

Several countries have banned and/or restricted Wi-Fi from nursery schools, kindergartens and elementary.

## **IN FRANCE**

Cell phones are labeled with safety information that says:

- Minimize children's use
- Use speakerphone to keep phone away from the brain.
- "Keep radio equipment away from the belly of pregnant women, and away from the lower abdomen of adolescents."



"For children the cancer risks may be greater than that for adults because of greater penetration and absorption of cell phone radiation in the brains of children and because the developing nervous system of children is more susceptible."

 Ron Melnick PhD, Senior Toxicologist at National Institute of Environmental Health Sciences, Retired

# **But wireless is everywhere?**

Simple steps like keeping cell phones and Wi-Fi devices away from your child's head and body will significantly reduce a child's exposure and could greatly reduce your child's risk of cancer and other disease.

# Why is it legal?

Wireless was never premarket tested for children's safety. A scientific review of all the science has not been done by the FDA, CDC, FCC, NCI nor the EPA.

# Is our government doing anything?

The FCC's cell phone and wireless radiation exposure limits are from 1996. They do not protect children from health effects from long term exposures. It will take years before federal regulations are updated.

#### **NEW JERSEY EDUCATION ASSOCIATION**

How to minimize health risks from electronics

- Keep devices away from the body and bedroom.
- Put devices on desks, not laps.
- Hard wire all devices that connect to the internet.
- Hard wire all fixed devices such as printers, projectors and boards.
- Use hard-wired phones instead of cell or cordless phones.
- Turn off Bluetooth devices when not using them.

#### **Hardwired & Corded Connections**

- Swap out Wi-Fi with ethernet for computers.
- Special ethernet adapters allow you to hardwire smaller devices such as tablets and smartphones.
- Instead of Bluetooth, use hardwired corded connections i.e mouse, keyboard and speakers.

#### **Did You Know?**

Cordless phones, Wi-Fi and Bluetooth "smart" speakers, virtual reality, video game consoles, baby monitors, watches and fitness monitors all emit wireless radiation, even when you are not using them.

#### **Create A Sleep Sanctuary**

An easy quick start is to power off wireless networks at night. Remove electronics and screens from the bedroom.

# American Academy of Pediatrics Safety Tips For Families

- Use cell phones in speaker mode and distance the phone from your head.
- Avoid carrying your phone against the body like in a pocket, sock, or bra. Cell phone manufacturers can't guarantee that the amount of radiation you're absorbing will be at a safe level.
- If you plan to watch a movie on your device, download it first, then switch to airplane mode while you watch in order to avoid unnecessary radiation exposure.
- Keep an eye on your signal strength (i.e. how many bars you have). The weaker your cell signal, the harder your phone has to work and the more radiation it gives off.
- Avoid making calls in cars, elevators, trains, and buses. The cell phone works harder to get a signal through metal, so the power level increases.
- Cell phones are not toys or teething items.
- Make only short or essential calls on cell phones.

""The Council recommends limiting exposures... Wi-Fi can be turned off and wired local area network (LAN) can provide a reliable and secure form of networking ..without any microwave electromagnetic field exposure."

 Maryland State Children's Environmental Health and Protection Advisory Council Wi-Fi in Schools Report

