

## **Beware of electromagnetic field (EMF) Radiation**

It is really surprise that we are living with Hazards !!

It's not a challenges made by those who spend days in a cage with hundreds of poisonous snakes or scorpions.

But, You know that we are living with Hazards !! Yes, we are surrounded by the electrical and magnetic radiation, which created, by the electrical appliances.

Now a days we are using electrical (magnetic) appliances starting from Tooth Brush, Cellular Phone, Hair Dryer, Microwave, Radio, CD Player, Video Player, TV, Computer and many more ...

These appliances produce at least two types of (electromagnetic fields) EMF radiation: Electric fields and Magnetic fields. While the scientific research to determine which of these two types is of greater concern is not yet conclusive, we do know that people can be sensitive to either.

The primary proven effect of exposure to this radiation is tissue heating, which, in turn, can lead to adverse health effects when exposures are excessive. However, in the extremely low frequency, or ELF range (300 Hz and below) of electromagnetic energy, the uncoupled electric and magnetic fields do not cause heating and so have not been thought to be capable of causing similar adverse health effects.

At high intensities, ELF electric and magnetic fields have known effects on humans. These occur when the fields induce current densities above those typical in the body.

From the above list of home appliances, the TV and Computer Monitor (video display terminals or VDT) will be more harmful because we are using this VDT continuously in a close distance.

Scientific research indicates that video display terminals cause four types of electrical and magnetic fields: (1) an electrostatic field associated with high voltage applied to the internal surface of the cathode screen; (2) a magnetic field of extremely low-frequency generated by the vertical scanning coil; (3) a low- frequency magnetic field generated by the horizontal scanning coil; and (4) a low-frequency electrical field generated by the high voltage flyback transformer. This results in VLF and ELF emissions from the back and sides of monitors.

Conventional computer monitor shields are great for reducing glare and electric field from the front of the monitor. But if you spend time near the sides or back of a monitor or television set, you are not protected at all.

The National Institute for Occupational Safety and Health reports three specific health problems that are generally attributed to operators' exposure to radiation emitted from VDTs:

(1) cataracts; (2) reproductive problems; and (3) facial skin rashes.

To avoid these hazards, the Institute of Electrical and Electronics Engineers, Inc., suggest to sitting in a minimum distance of 29 inches from the front of the display and 4 feet from the sides or back of the display. And since an office partition will not shield users from ELF emissions, workspaces should be designed so that no one in an adjoining area is within 4 feet of the sides or back of a monitor in someone else's work area.

## **Please read the “quotes” of the electromagnetic radiation!**

### Concerning power lines and appliances:

"EMF's - always present near power lines and working electrical appliances - are linked to such diseases as leukemia and breast cancer." (USA Today)

"The National Council on Radiation Protection and Measurements (NCRP) committee charged with evaluating the potential health effects of electromagnetic fields (EMFs) has completed a draft report that calls for strong action to curtail the exposure of the U.S. population. "It took us nine years but we finally reached agreement," committee chair **Dr. Ross Adey**

"...Sweden has concluded that EMF's do lead to higher rates of cancer...I, frankly was somewhat impressed by the arguments made by the Swedes." - **President Bill Clinton**

### Concerning televisions and computer displays (VDTs):

"Most unsettling of all, perhaps, is the fact that the pulsed VLF and ELF magnetic fields found routinely within a radius of about two feet from the average CRT computer terminal can be as strong as, or even stronger than, the sixty-hertz magnetic fields found inside the homes in which Wertheimer and Savitz discovered children to be dying unduly of cancer." **The New Yorker, June, 1989.**

"...sit at least ten feet away from the television set." **Time Magazine, July 17,1989.**