



State of Israel | ISRAEL Ministry of Environmental Protection  
 המשרד להגנת הסביבה | وزارة حماية البيئة  
 שלום עם הסביבה

Home | About Us | Environmental Topics | Environmental Indicators | International Cooperation | Laws & Regulations | Education | Publications

Search

- > E-Bulletin
- > Ministerial Policy
- > News
  - Environmental Protection Ministry Warns: Keep Cell Phone Chargers at a Distance [22/07/08] [Archive](#)
- Environmental Links
  - > NGOs
  - > Selected Links
- Public Access
  - > FAQ
  - > Emergency Center
  - > Ask the Ministry
- Make This Site Your Home Page

## News

[Homepage](#) > [News](#) > Environmental Protection Ministry Warns: Keep Cell Phone Chargers at a Distance

### Environmental Protection Ministry Warns: Keep Cell Phone Chargers at a Distance

Updated: 07/22/2008

The Ministry of Environmental Protection warns that a **mobile phone charger or any small transformer should be kept at least a half a meter away from the human body to avoid the risk of radiation.**

The warning comes in the wake of hundreds of queries from residents asking about radiation exposure when recharging their cell phone. A sample check carried out by the Environmental Protection Ministry showed that most of these residents sleep while charging their cell phones next to their beds.

The head of the Noise and Radiation Abatement Division in the Ministry of Environmental Protection, Dr. Stelian Ghelberg, says that placing a transformer less than half a meter away from the body in general and the head in particular is tantamount to sleeping under a tension line. "Extended average exposure to more than 2 milligauss," says Dr. Ghelberg, "is linked to an increased risk of cancer. Exposure to power frequency magnetic fields at night may disrupt the production of melatonin, a hormone which is considered vital to the immune system"

Background magnetic field levels exist inside every house or apartment and the radiation radius to the cell phone charger, when the phone is shut off, reaches about 0.4 milligauss at a distance of 2 meters, which is of negligible impact.

At the same time, the magnetic field right next to a transformer (such as that in a cordless phone or clock-radio) or a mobile phone charger reaches 1,000 milligauss. At a distance of 30 cm from the transformer, the magnetic field reaches some 3-4 milligauss and at a distance of half a meter, it is reduced to less than 2 milligauss. Therefore, **the minimum recommended distance from a transformer is half a meter.**

Furthermore, it is important to remember that transformers with a magnetic field similar to a cell phone charger are found in audio systems, electric clocks and fluorescent bulbs.

### **More about Non-ionizing Radiation**

Non-ionizing radiation includes the spectrum of extremely low frequency (ELF) fields from the electricity grid and electrical equipment and radio frequency (RF) fields from communication and telephony facilities, cellular networks and television and radio broadcasting stations. Non-ionizing radiation also includes the spectrum of visible light, lasers, infrared and some ultraviolet.

The Ministry of Environmental Protection supervises radiation sources and service providers by means of radiation permits.

Ministerial policy on non-ionizing radiation is based on the precautionary principle with the aim of minimizing, as far as possible, public exposure to radiation, using available technologies at reasonable cost. Another ministerial objective is to minimize areas in which building restrictions are in effect due to radiation.

### **More Links:**

- [Non-ionizing Radiation](#)
- [Non-ionizing Radiation Law, 2006](#)



---

[Copyright ©](#) | [Contact Us](#) | [Index](#) | [Site Map](#) | [RSS](#) | [Israel Ministry of Foreign Affairs](#) | [Israel Defence Force](#) | [Government Gateway](#)

best viewed with 600X800 resolution, with browsers Explorer +5 Netscape +6.2 and Mozilla  
Copyright © 2008 The State of Israel. All Rights Reserved