

National Activity Report – ISRAEL 2014

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General Research Activities related to EMF

The Ministry for Environmental Protection– checked the sign posts of a large sample of power cabinets located on streets within cities. These sign posts are a prerequisite for receiving a permit for placing power cabinets in the street. More than 30% did not have sign posts; exposure levels in close proximity to such cabinets may be higher than 200 μ T.

The Ministry for Environmental Protection and Hadassah Academic College conducted field measurements which showed that environmental RF exposure decreases when the number of cell sites per 1,000 inhabitants increases.

TransExpo: International Study of Childhood Leukemia and Residences near Electrical Transformer Rooms - The Israeli branch of a multi-national case control study of childhood leukemia among children, who lived in apartment buildings with built-in transformers, is in its final data analysis stage. Results are expected within the next year. The study is funded by the Electric Power Research Institute (EPRI).

GERoNiMo (Generalised EMF Research using Novel Methods) Study – The Cancer and Radiation Epidemiology Unit at the Gertner Institute, Tel Hashomer is participating in a multi-national project aimed at closing gaps of knowledge on health effects of EMF and reducing exposure (<http://www.crealradiation.com/index.php/en/geronimo-home>). Using an integrated approach, researchers from different disciplines will address key questions related to EMF aimed at:

- Understanding the mechanisms underlying possible health effects of EMF ;
- Characterizing current and future levels of EMF exposure in Europe ;
- Furthering the state of knowledge on EMF and health ;
- Improving health risk assessment of EMF; and
- Reinforcing policy development and propose non-technological means to reduce EMF exposure.

MobiKids Study - The Cancer and Radiation Epidemiology Unit at the Gertner Institute, Tel Hashomer is currently participating in the international Mobikids study aimed at evaluating the potential risk of environmental exposures (including the use of communication devices and other exposures to electromagnetic fields) on the development of brain tumors in children and adolescents. This study is being executed within the 7th Framework Program of the European Union.

New Policies and Legislations Regarding EMF Exposure

Deployment of the 4G network - Cellular operators will share common sites, i.e., cell sites and base stations as a prerequisite for deployment of the 4G network. This decision followed an inter-ministerial committee justification document for the deployment of the 4G cellular network in Israel. The justification document, issued by the Ministries of Health, Communication, and Environmental Protection in 2012, recommended that the 4G network will be deployed using the most efficient technology that will lower exposure.

The process of determining thresholds for ELF exposure in Israel continues. The discussion focuses on "bridging the existing gaps" between the Ministries as far as their basic approaches concerning the appropriate regulation. Various opinions were taken into account including a

report entitled "Developing NIR ELF Regulations in Israel: Challenges and Implementation" written by Prof. Leeka Kheifets of the Department of Public Health, UCLA.

Areas of Public Concern and National Responses

Indoor distribution substations of apartment buildings – remain a public concern in Israel. In the past, low voltage cables exiting the distribution transformers were conducted close to the ceiling of the transformers' room (which, in many cases, was the floor of the apartment above). The Israeli Electric Company has re-wired and moved the cables and the low voltage electricity panel board close to the floor of the transformers' room, and as far away as possible from inhabited sites. However, even after rewiring of the cables, many people still do not want to reside in apartments above indoor distribution substations. The current recommendation of the Ministry of Environmental Protection and the inter-ministerial extremely low frequency (ELF) committee is to build the site distribution substations either in open spaces or below open spaces.

Wi-Fi in schools – is the subject of a petition to the Israeli Supreme Court requesting the Ministry of Education to ban the use of Wi-Fi in Schools. The plaintiffs are the National Parents' Leadership and the Organization for "Sensible" Use of Cellular Technology.

The Ministry of Education's policy, based on the recommendations of an inter-ministerial committee, is to prefer wired internet whenever possible except for the rare cases where installing wired internet is cumbersome or may pose a safety hazard.

The petition is based on the fact that despite its declared policy, the Ministry of Education encourages schools to install Wi-Fi through the funding of wireless networks in schools and kindergartens.

In the context of this petition, the Ministry of Health was asked to study the issue of electromagnetic hypersensitivity (EHS) due to specific claims that adults and children are affected by very low non-ionizing radiation levels.

New Public Information Activities

A new national information center, entitled "TNUDA", on the health impacts of non-ionizing radiation –jointly founded and financed by the Ministry for Environmental Protection and the Ministry of Science, Technology and Space – was established in 2013. Following a national tender, it was decided that the center will be operated by the Cancer and Radiation Epidemiology Unit at the Gertner Institute jointly with Holon Institute of Technology and led by Prof. Siegal Sadetzki. The purpose of the center is to provide balanced information on the health impacts of non-ionizing radiation based on scientific evidence. The relevant information is mainly provided through a website. Four major target audiences were identified: the general public; government offices; the research community; and the industry. A steering committee supports and oversees the center's activities.

During 2013, the information center provided services to the general public, government offices, foreign embassies and various organizations. These services included information on the health effects of different sources of non-ionizing radiation and the safety distances from these sources, information on the health effects of WiFi on schoolchildren, comparison among standards of EMF exposure in Israel and abroad, information on the regulation of wireless communication in Israel, opinions on the health effects of using mobile phones in elevators as well as on the health effects of smart meters that use wireless networks for communication.

The Environmental Protection Ministry decided to publish the licenses of facilities used for transmission and distribution of electricity as well as the exposure levels (of the average current) in the vicinity of the facilities