

National activity report – ISRAEL 2012

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General Research Activities related to EMF

Participation in the international multi-centered "MOBI-KIDS" Study – the rapid worldwide increase in mobile phone use in adolescents and, more recently, children, has generated considerable interest in the possible health effects of exposure to radio frequency (RF) fields. Within the 7th Framework Program of the EU (European Union), a call for research proposals to explore health effects of RF exposure among children and adolescents was set up (ENV.2008.1.2.1.1).

In response, an international collaboration was formed to assess the potential carcinogenic effects of childhood and adolescent exposure to radio frequency (RF) from mobile telephones on the central nervous system (CNS).

Sixteen countries (which include 19 centers) participate in this project: 9 countries received funding from the EU (Austria, France, Germany, Greece, Israel, Italy, The Netherlands, Spain and United Kingdom) and 7 countries were funded by other sources (Australia, Canada, India, Japan, Korea, New Zealand, and Taiwan).

The principle investigator of this study is Prof. Elisabeth Cardis (CREAL, Spain).

In Israel the study is being carried out by the Cancer & Radiation Epidemiology Unit at the Gertner Institute, Chaim Sheba Medical Center (Israeli PI Prof. Sadetzki). The Israeli Center is responsible for WP2 - finalizing the study instruments including the study protocols, questionnaires and procedures for implementing the study.

According to the initial plan, the study population (ages 10-24 years) will include ~2,000 cases and ~4,000 controls, and will be carried out between the years 2009-2014.

The Israeli Non-ionizing Research Center - headed by Prof. Siegal Sadetzki - was established in the Health Ministry. The aims of this center are to determine a public health protection policy against non-ionizing detrimental health effects, to distribute the updated knowledge in this field and to provide answers to public concerns on this issue. Within this framework, the Center will perform research concerning health outcomes of non-ionizing radiation in Israel, thus assisting the Israel Health Ministry to formulate policy in this area.

Intervention programme & assessment on educated use of mobile phones in schools - In accordance with a comprehensive position paper that was presented to the Committee of the Interior & Environmental Protection in the Israeli Parliament (Knesset) on exposure to electromagnetic radiation in schools, an intervention program was formulated. This program is aimed at 7th and 9th grades pupils and includes lessons in science and social sciences, in subjects dealing with radiation in general and mobile phone radiation in particular. Within the framework of this program, emphasis will be placed on the precautionary principle and on means to reduce the exposure. In parallel, research will be carried out to assess its effectiveness. The program is being carried out with the cooperation of representatives of the Health & Education Ministries.

New Policies and Legislations Regarding EMF Exposure

Determining a standard for magnetic field from the electricity network – During the past year and following a professional assessment of this issue, a joint position was

formulated by the Health & Environmental Protection Ministries. According to this position, a threshold of 4mG (as a daily average on the day with the highest electrical usage) for 50 Hz magnetic field should be adopted, with respect to continuous and prolonged exposure.

No need to adjust the standard for RF exposure - The Committee of the Interior & Environmental Protection in the Israeli Parliament (Knesset) demanded that the Health & Environmental Protection Ministries will check if it will be possible to adopt in Israel a standard of 0.01 W/m² for the indoor public exposure to cellular radiation. It was decided that the present standard (1/10 of the ICNIRP recommendations) together with a thorough implementation of the precautionary principle will achieve the needed level of protection.

Areas of Public Concern and National Responses

Introduction of 4G cellular technology in Israel – Following the General Directors' committee recommendations from 2005 (in which it was decided that before moving to a new generation of cell phone communication, the government would hold an open discussion concerning the advantages and disadvantages of such a move), the NIR law of 2006 (by which no new mass technology can be implemented without a thorough investigation of possible damage with respect to the public and individual benefits), the IARC classification of RF as a 'possible carcinogen' and the position of the Legal Advisor to the Government according to which the ministries of health, communication and environmental protection should collaborate to formulate a document which will justify such a move. This document should be published in order to receive public feedback and to fuel open discussion.

The document especially refers to the way the cellular 4G infrastructure should be spread out, in order to minimize any additional environmental radiation.

New Public Information Activities

Smart meters – the Environmental Protection Ministry asked the local authorities, through the council of local authorities, to implement the deployment of smart meters mainly using cables (PCL, fiber optic etc.) and to use wireless smart meters only in places without a cable infrastructure.

Bus stations close to power distribution devices – the Environmental Protection Ministry asked the local authorities, through the council of local authorities, to be aware of the need to keep a minimum distance between bus stations and electric substations, pylons and junction boxes in order to minimize unjustified exposures.

Wireless internet in schools – a joint ministerial committee of the Education & Health & Environmental Protection Ministries gave advice to the Education Minister about the proper ways to implement the smart class project. The committee produced a report that was published for the public comments. Since the school has to be a place free of radiation, the committee agreed that the internet have to reach the personal computers through cables and not wireless. Methods to deploy the cables such that no safety risks will be created were proposed both for existing and to be built schools.

Use of cell phones in buses, trains and elevators – the Environmental Protection Ministry asked to limit the use of cell phones in buses and to prohibit the use of cell phones in elevators and in at least one wagon (the quiet wagon) in each train. The reason is to combat involuntary exposure both to noise and radiation.