

# Japan

## Report on EMF Activities

### 10<sup>th</sup> International Advisory Committee on EMF

June 2005

ELF aspects

Japan NIES report for 2004-2005

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He has been working on this topic as a representative of an epidemiological study on childhood cancer in relation to ELF-EMF in Japan, secretary of MOE committee on EMF and Health (chaired by Dr. Takaku, president of Jichi Medical School), member of committees of Ministry of Economy, Trade and Industry.

1. The paper of Japanese epidemiological study on childhood leukemia in relation to residential EMF-ELF exposure was accepted by IJC (International Journal of Cancer) recently. The final conclusion was quite similar to the current WHO's assessment of "2B".
2. In 2004, a research group set up by Japan MOE (Division of Environmental Health, Director Dr. Kamiya) estimated EMF-MF exposure distribution among children based on the available information including the above epidemiological study results. A part has been reported in the WHO/UNESCO/NATO workshop held in Yerevan in 2005, as described in the following.
  - (1) Exposure distribution in the Japanese epidemiological study on childhood leukemia was analyzed, in which the risk of childhood leukemia relating the use of electric appliances was simultaneously examined in terms of the use by the children as well as by their mothers during conception.
  - (2) An additional exposure study was done in 70 children who were selected from the control subjects in the above study who lived in the Tokyo area. One week personal monitoring and children's bedroom measurement was done.
  - (3) Detailed measurement of ELF magnetic fields was done in 10 residents including 2 children's bedrooms which showed high MF levels above 4 mG.
  - (4) Exposure metrics of children was estimated based on the above data in relation to residential exposure including the use of electric appliances.
3. NIES in cooperation with Japan Society of Risk Analysis held a workshop in Tokyo in 2004, which was open to the public, on the current situation of the WHO project, followed by a closed workshop in Tsukuba on the epidemiological risk of childhood leukemia by inviting Drs. Leeka Kheifets, Anders Ahlbom, Chris Portier and other experts. This was the second workshop on the epidemiological risk study after the 1<sup>st</sup> one in San Francisco organized Dr. Leeka Kheifets at the initial phase of the WHO project.

Additional information:

- 1) Dr. Michinori Kabuto was awarded a prize by the Japan Society of Risk Analysis held in Korea, 2004.
- 2) A research project is being prepared on the risk communication method for the next fiscal year as part of a project on "Newly Emerging Risks through Technological Development", funded by the Ministry of Education, Culture, Science and Technology.