International EMF Project

Welcome to the
10th Anniversary Meeting of the
International Advisory Committee
13-14 June 2005, WHO, Geneva

Dr MH Repacholi
Co-ordinator, Radiation and Environmental Health
World Health Organization, Geneva, Switzerland
RADIATION AND ENVIRONMENTAL HEALTH

Dr Michael Repacholi
Co-ordinator

Interns

Unit Secretary
Annette Nock

Dr Eric Van Rongen
H C Netherlands
Secondment

Dr Rick Saunders
HPA/NRPB
Secondment

Non-Ionizing Radiation

Dr Emilie van Deventer
Scientist

Dr Chiyoji Ohkubo
Scientist

Vacant
Scientist

Sarah Bullock
Admin. Assistant

Ionizing Radiation

Dr Shunichi Yamashita
Medical Officer

Dr Zhanat Carr
Medical Officer

Dr Hajo Zeeb
Medical Officer

Teija Katajainen
Admin. Assistant

June 2005
EMF Project Objectives

- review the scientific literature on biological effects of EMF exposure
- identify gaps in knowledge requiring research that will improve health risk assessments
- encourage a focused agenda of high quality EMF research
- formally assess health risks of EMF exposure after the required research is completed
- encourage internationally acceptable uniform and harmonized standards
- provide information on risk perception, risk communication, risk management
- advise national programs and non-governmental institutions on policies for dealing with the EMF issues
**Structure**

- EMF Project Secretariat
- International Advisory Committee
- Research Coordinating Committee
- Standards Harmonization Committee
- International Organizations
- Collaborating Institutions
- >60 National Authorities
International Advisory Committee
Terms of Reference

- Provide oversight on the conduct of the Project.
- Review Project outputs
- Provide a forum for a co-ordinated international response on the health concerns raised by exposure to EMFs.
  - Biological effects
  - Health issues
  - Policy recommendations
  - Standards
Role of WHO staff

- Facilitate and implement the program agreed by the International Advisory Committee
- Form part of the non-voting secretariat at all meetings and expert groups
- Compile fact sheets on topical issues and reports of meetings published after comments by IAC and outside experts
- Give presentations summarising the conclusions of WHO meetings or expert groups
- Ensure compliance with WHO’s conflict of interest policies (Committee membership, funding, etc)
WHO Secretariat

- Mike Repacholi
- Emilie van Deventer
- Chiyoji Ohkubo
- Sarah Bullock
- Rick Saunders
- Eric van Rongen
- Leeka Kheifets

Imagine Eric here
Membership

- Open to any WHO Member State department or representatives of national institutions
- Many new Member States have joined....
- Over 60 national authorities are currently involved in the Project
## Meetings and activities with international agencies (July 2004-June 2005)

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<th>Agency</th>
<th>Meeting</th>
<th>Activity</th>
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| ICNIRP | - Annual meeting, Sept. 2004 (Munich)  
- Annual meeting, April 2005 (San Antonio, TX) | - co-sponsor of Children workshop  
- co-sponsor of Hypersensitivity workshop  
- agreement on preliminary review on health effects for RF EHC |
| IARC | - | - Conduct Interphone study with 13 countries to identify any relationship between mobile phone use and head and neck cancer |
| UNEP | - | No EMF activities |
| ILO | Visit to China Standards Agency, April 2005 (Beijing) | - Assisting with the drafting of the brochure on occupational EMF management |
| EC | - EIS-EMF Advisory Board, July 2004 (Ispra, Italy)  
- Attended Risk Perception and Risk Communication workshop, July 2004 (Ispra, Italy)  
- EMF-NET Coordination committee, Oct. 2004 (Geneva)  
- EMF-NET Coordination committee, Jan 2005 (Luxembourg) | - co-sponsor of Children workshop (EMF-NET and COST 281) and of special issue of BEMS Journal (EMF-NET)  
- co-sponsor of Hypersensitivity workshop (EMF-NET)  
- co-sponsor of Base Station workshop |
| ITU | Inter-agency meeting, May 2005 (Geneva) | special session organized in ITU/Arab League regional meeting, October 2004 (Cairo) |
| IEC | - | - Participation in mobile phone SAR measurement standard with IEEE  
- Preparation of standard measurement techniques for EMF fields  
- Preparation of base station emission standard. |
| NATO | Advanced Research Workshop, March 2005 (Yerevan, Armenia) | Co-sponsor of Armenia meeting |
## Activities with collaborating centers (July 2004-June 2005)

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| Brooks Air Force Base, TX (USA) | ▪ Co-sponsor of regional meeting in Bangkok (Jan. 2005)  
▪ Co-sponsor of and provision of resources for the Dosimetry Workshop in Moscow (Dec. 2005) |
| ARPANSA (Australia)          | - Static fields EHC document preparation (C. Roy)  
- Upcoming RF brochure for local authorities (C. Roy) |
| BfS (Germany)                | - Reviews of EHC on static fields                                      |
| FDA (USA)                    | - Reviews of EHC on static fields                                      |
| Karolinska Institute (Sweden)| - Pilot cohort study (A. Ahlbom)  
- Support for the mobile phone cohort study |
| NIES (Japan)                 | - Case control study of childhood leukaemia and residential power frequency magnetic fields (in press) |
| NIEHS (USA)                  | - Hosted working group on protective policies for ELF EHC  
- Reviews of EHC on static fields |
| NIOSH (USA)                  | - Brochure on occupational EMF management (G. Lotz)                    |
| NRPB/HPA (UK)                | - ELF EHC document preparation (40% of R. Saunders time)  
- Upcoming RF brochure for local authorities (A. McKinlay)  
- Agreement on future review on health effects for RF EHC |
New Collaborating Centres

- McLaughlin Centre for Population Health Risk Assessment at the University of Ottawa, Canada (focal point: Daniel Krewski), now formally approved by WHO
- Spanish Association Against Cancer, Madrid, Spain (focal point: Ana Fernández-Marcos) approved this year?
Risk Assessment

Key objectives:

- Conduct formal health risk assessments that incorporate research results into WHO's Environmental Health Criteria (EHC) monographs. Dr Eric van Rongen to update on Static Fields and Dr Emilie van Deventer to update on ELF Fields EHCs.

- Provide a coordinated international response using the EHC monographs as a database.
Two specialized workshops were held to assist the drafting of EHCs and to provide information for WHO recommendations and development of EMF exposure standards

- **Sensitivity of Children to EMF Exposure** (9-11 June 2004, Istanbul, Turkey) to review available evidence to determine if children, at any age, could be more sensitive to EMF exposure than adults... *Dr Mike Repacholi* to update

- **EMF Hypersensitivity** (25-27 October, 2004, Prague, Czech Republic) to review scientific evidence that certain people may be sensitive to EMF and display symptoms resulting from their exposure... *Dr Kjell Hanson Mild* to update
Scientific reviews: Part sponsored by WHO

- Washington, USA - BEMS, June 2004
- Moscow, Russia - Mobile communication and health: medical, biological and social problems, 20-22 September 2004
- Kos, Greece - 3rd International Workshop on Biological Effects of Electromagnetic Fields, 4-8 October 2004
- Ljubljana, Slovenia - From Bioeffects to Legislation, 8-9 November 2004...Dr Peter Gajsek to update
- Yerevan, Armenia - Mechanisms for Biological effects from EMF, 1-5 March 2005
Research Coordination

- **Research database** web-based database of research projects as a service to the research community. Updated and maintained with the support of COST 281 and Forschungsgemeinschaft Funk e.V. (FGF). WHO sincerely appreciates this help...Dr Chiyoji Ohkubo to update

- **Research agenda** identifies gaps in knowledge and formulates research areas that will help inform health risk assessments of EMF fields.
  - Over the past year, research recommendations following the Children's Workshop and Static Fields EHC.
  - Research needs for ELF will be updated during the Task Group meeting October 2005.
  - RF research agenda updated in 2003 and in 2004 following the Children's Workshop. Next update will follow the RF Task Group meeting in 2006-7.

Dr Mike Repacholi to update
Several studies have started that were promoted by the EMF Project:

- **Pilot cohort study:** A pilot study to determine whether a full cohort study could be carried to identify any adverse health consequences of using a mobile phone. Prof. Anders Ahlbom to update
- **Children's cohort:** A key recommendation of the Children's workshop was to develop a cohort of children using mobile phones. Dr Elisabeth Cardis to propose way forward
- **Russian/French study:** Studies conducted in the former Soviet Union suggested that microwave irradiation of rats disrupted the antigenic structure of brain tissue. Dr Mike Repacholi to update
Research Coordination
Input to funding agencies

The EMF Project works with international donors and national authorities to promote and fund research needs identified by WHO.

- **European Commission**: WHO has asked the EC to consider possible health consequences from static magnetic fields as a priority research area for their 7th Framework. The EC used WHO's EMF Research Agenda as a basis for their 5th Framework research priorities 5 years ago, making almost 20 million euros available for important EMF research areas.

- **MTHR (UK)**: EMF Project works with the Mobile Telephone Health Research program (MTHR) to cover the WHO research agenda. Approx. £18 million is being spent. Meetings were held 8-10 November 2004, 12-16 January 2005 in London.
Risk Management Activities

Objectives

- Facilitate internationally acceptable EMF standards
- Provide information on EMF protection programs
- Provide advice to all stakeholders about any hazards from EMF exposure and any needed mitigation measures.
Risk Management Activities

- **Standards harmonization:** While WHO strongly promotes the use of international (ICNIRP, 1998) standards, some countries want to develop or refine their own standards. Dr Emilie van Deventer to update.

- **Model legislation** facilitates the appropriate legal framework to protect the public and workers from potential adverse effects of EMF. The Model Legislation comprises a Model Act and Model Regulation. Dr Tom McManus to update.
Risk Management Activities
"Precautionary" Framework

- Renamed "Framework to Guide Public Health Policy Options in Areas of Scientific Uncertainty" or "Policy Options Framework" as a short title because misuse of "precaution" could lead to unpredictable or unjustified outcomes.
- Framework is a guide to develop rational, science-based policies that are reasonable and cost-effective, taking account of uncertainties in the science.

Dr Mike Repacholi to update
Risk Management Activities
Occupational management and Country focus

- Occupational EMF management: US National Institute of Occupational Safety and Health (NIOSH) drafting report "Occupational EMF Management". Dr Mike Repacholi to update

- Country focus: WHO's Country focus initiative provides basis to respond to countries needs.
  - EMF Project provides technical and economic support for meetings in regions and countries that face a crisis with respect to EMF.
  - Countries visited over the past year to support national or regional EMF programs include: Argentina, Bahrain, Brazil, China, Egypt, Greece, Netherlands, Portugal, Russia, and Spain.
Risk Communication Activities

Enquiries

- Many enquiries come to the EMF Project from the general public, the media (newspapers, TV, radio) and governments.
- Due to staff shortage, Professor Ken Foster handled most public enquiries for several months. Dr Chiyoji Ohkubo now does this.
- Drs Repacholi and van Deventer have provided reports to national media. This is a continuing activity to promote the EMF Project and its conclusions and recommendations.
Risk Communication Activities
Home page

- WHO website is in 6 languages (Arabic, Chinese, English, French, Russian, Spanish). EMF Project website has partly been translated in some of these languages and is continually updated.
- Second most visited website in the SDE cluster. Graph shows the hits from June 2004-June 2005. Note the upward trend in hits.
Risk Communication Activities
National contacts and information

A country-focused database listing Member States of the EMF Project set up:

- to provide national contact information so the public to dialogue with their local representative
- to provide national information resources on EMF and health
- to summarize key activities and concerns at the national level.

IAC members are encouraged to update information regularly to WHO.

Dr van Deventer will provide more information
Meetings attended by WHO staff

- July 2004, Ispra, EIS-EMF Advisory Board and "Risk perception and risk communication" w'shop
- Sept. 2004, Moscow, "Mobile communication and health: medical, biological and social problems"
- Sept. 2004, Lausanne, "Téléphonie mobile et droit: quelles limites au déploiement du réseau d'antennes?"
- Sept. 2004, Brussels, Mobile Communications: Health, Environment and Society
- Oct. 2004, Cairo, Regional Seminar "The role of ICT in protecting man and environment: How to limit the impact of its use"
- Oct. 2004, Prague, WHO Workshop on Electrical Hypersensitivity
- Nov. 2004, Patras, International Conference on Electromagnetic Fields and possible health effects
- Nov. 2004, Ljubljana, International Conference on EMF - From bioeffects to legislation
- Nov. 2004, Moscow, Ministry of Health Russian workshop on IR and NIR research and protection
- Nov. 2004, Lisbon, EMF seminar, Portuguese Ministry of Health
- Nov. 2004, Brasilia, Chamber of Representatives, hearing on mobile telephony and health
- Feb. 2005, Brussels, New WHO approach towards precaution, European Policy Centre Risk Forum
- Feb. 2005, Zurich, . COST 281/ MCM workshop on "Do sinusoidal versus non-sinusoidal waveforms make a difference?"
- May 2005, Bilthoven, Netherlands, International Workshop on health risk and impact assessment
- May 2005, Stuttgart, German-Japanese Forum on Risk Management & Communication
Questions for meeting

- Are there any changes to Project activities needed by Member States?
- Are there meetings needed that are not covered by the current program?
- Do Member States find the web page useful?
- Should there be a greater effort to produce public information such as more fact sheets…on what topics?
- Others IAC members would like to have addressed?