

EMF AND HEALTH – WHAT FUTURE RESEARCH IS NEEDED

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PRINCIPLES

- Aim to improve management of risk by reducing scientific uncertainties
- Identify major uncertainties that impact on risk management
- Prioritise on extent of uncertainty, potential impact, tractability, and work already ongoing

MTHR REVIEW 2007

QUESTIONS NOW OF LOWER PRIORITY

- Short-term (<10 years) risk of brain tumours from use of mobile phones
- Immediate effects of RF fields on brain function
- Hypersensitivity to mobile phone and base station emissions
- Biological mechanisms
- Exposures from base stations (other than higher power microcell)

MTHR REVIEW 2007 QUESTIONS OF HIGHEST PRIORITY

- Long-term risk of cancer in adults
- Long-term risk of other chronic diseases (eg Alzheimer's disease, Parkinson's disease)
- Risk of cancer in children
- Effects on cognitive development in children
- Hypersensitivity to emissions from TETRA hand sets and base stations

COSMOS STUDY

- Prospective cohort study of 90,000 adult mobile phone users by Imperial College
- Parallel studies in Denmark and Sweden (total cohort 200,000)
- Long-term risks of cancer and other chronic diseases in adults
- £3.1 million for UK component

COSMOS STUDY

- Recruitment via operator subscription lists
- Exposure to mobile phones by repeated questionnaires and linkage with traffic data records
- Exposure to potential confounders by baseline questionnaire
- Follow-up for mortality and cancer incidence through national registers
- Follow-up for changes in symptoms by repeated questionnaire (year 4 and then 5-yearly)
- First analysis after five years

HYPERSENSITIVITY TO TETRA

- Base stations – University of Essex
- Hand sets – Kings College London
- Double-blind, randomised, cross-over, provocation studies
- Expected completion 2008

COGNITIVE DEVELOPMENT AND SYMPTOMS IN SECONDARY SCHOOL CHILDREN

- Outline proposal from Imperial College for longitudinal study selected in competition
- Full proposal now undergoing peer-review for decision on funding in September

CANCER IN CHILDREN

- International case-control study (CEFALO) is ongoing
- Need to monitor national trends in incidence of childhood cancer at different ages

SUMMARY

- Fewer pressing research needs than in 2001
- MTHR 2 addresses important outstanding questions
- Coordination with other countries and monitoring of emerging findings
- New evidence will be reviewed as it accumulates