TETRA-RELATED RESEARCH FUNDED BY MTHR AND HOME OFFICE

David Coggon

UNIVERSITY OF Southampton
School of Medicine

MRC Epidemiology Resource Centre

ACUTE CARDIOVASCULAR EFFECTS

Tony Barker

- Randomised, blinded exposure to modulated signal, carrier wave and sham in 120 volunteers

- No detectable effects of TETRA handset signals on blood pressure or adrenaline/noradrenaline

EFFECTS ON EEG

Stuart Butler, Alan Preece

- No detectable effects of TETRA handset signals on EEG potentials evoked by a range of stimuli
- No evidence that TETRA signals evoked potentials

SAR DISTRIBUTION IN HEAD
Peter Dimbylow

- Modelled SAR distribution in head during use of a TETRA handset

SARS FROM TETRA RADIOS

Phil Chadwick

- Measured and predicted SARS agreed well
- Negligible impact of vehicle antenna for occupants
- Only significant SAR inside vehicle from officer's own radio
- Exposures similar to those outside a vehicle

DEMODULATION IN TISSUES

Peter Excell, Q Balzano, Chris Davies, Christine Kowalczuk

- No evidence that tissue can demodulate a modulated 900 MHz signal

NEUROPSYCHOLOGICAL EFFECTS
Adrian Burgess

- Explores effects of TETRA handset signal on cognitive function assessed by psychomotor and attentional tests

TETRA AND HYPERSENSITIVITY SYMPTOMS

- Handset signals – James Rubin
- Base station signals – Elaine Fox

COHORT STUDY OF TETRA USERS (AIRWAVE)

Paul Elliott

- 12 year follow-up study of ~140,000 police and civilian users of TETRA
- Expected to be completed by 2018

BRAIN PHYSIOLOGY AND FUNCTION IN MICE

Zenon Sienkiewicz, James Uney, John Tattersall

- No detectable effects of TETRA-like signal on animal behaviour
- Altered electrical response to stimulation of isolated hippocampal tissue inconsistent with other observations and ascribed to experimental artefact
- No detectable effect on gene expression in exposed hippocampal tissue

INTRACELLULAR CALCIUM IONS
John Tattersall

- No detectable effects of TETRA signal on calcium ion levels in brain cells across a range of power levels

- No effect of TETRA signal on heart cell beat frequency or on rise in calcium ions during each beat

NEW MTHR STUDIES OF MOBILE PHONES

- COSMOS cohort study of mobile phone users – Paul Elliott
- Cognitive function in secondary school children – Mireille Toledano