

Dear Sir or Madam

## **An invitation to take part in the study to evaluate the effects of mobile telephone usage on labyrinthine function**

We are a group of clinicians and researchers from the National Hospital for Neurology and Neurosurgery in London, who are interested in whether using mobile phones has any effect on the inner ear and may therefore give rise to hearing or balance symptoms. The following letter explains the research in more detail, and what it would involve for you. Please take the time to read through the following information carefully and discuss it with friends, relatives or your GP. Please ask us if you would like some more information (call Dr Robin Cox 01773 208636). Thank you for reading this.

We would like to ask you to participate in this research project, the purpose of which is to investigate whether there is any subtle change in the organ of balance and hearing in individuals who use mobile telephones.

If you consent to participate in our research project, you will undergo several hearing and balance tests, before and after a 30-minute exposure to a mobile telephone.

Three different modes of exposure from a mobile telephone will be used: pulsed, continuous and dummy (no exposure). Neither you, nor the tester, will know whether the exposure is real or dummy, as a special device, resembling a mobile phone, has been constructed for the project and approved by the National Radiological Protection Board. The electrical fields given out by the phone, when it's on, will be no stronger than those that can be given out by normal mobile phones and fall within international safety guidelines.

The tests include:

1. **A test to assess the middle ear function:** a sound tone under mild pressure will be given to you through a small rubber probe inserted in your ear. This test gives the sensation you may experience passing through a tunnel in a train.
2. **Standard hearing test:** quiet tones are presented through the earphones, and you will be asked to respond by pressing the button when you hear the sound.
3. **A test to assess the inner ear (hearing) function:** Clicking sounds are presented using foam probes inserted in your ears and the responses are recorded by the computer. This test does not require your active participation.
4. **A test for balance function** (for the sense of horizontal and vertical): you will be asked to sit in total darkness, 2 metres from a blackboard, on which a luminous bar is mounted, and to rotate

the bar in both directions using a controlling knob, to achieve the horizontal or vertical position of the bar.

5. **A test for balance function** (for examination of the eye movements): will be performed using the goggles (with camera and infra-red light), which is held in place by an adjustable strap around the head. You will be asked to look to the front, right and left.

These tests are entirely harmless and do not cause any discomfort. You will be asked to attend one single session or two separate sessions, during which your each ear will be tested three times (for three modes of mobile telephone). The single session will last 5-6 hours, with two 1-hour intervals for resting, while the two separate sessions will last 2-3 hours each. We will pay your travel expenses.

Your participation in the trial is entirely voluntary. You are free to decline to enter or to withdraw from the study at any time without having to give a reason; if you choose not to enter the trial, or to withdraw once entered, this will in no way affect your future medical care. All information regarding your medical records will be treated as strictly confidential and will only be used for medical purposes. Your medical records may be inspected by competent authorities and properly authorised persons, but if any information is released this will be done so in coded form so that confidentiality is strictly maintained. Participation in this study will in no way affect your legal rights.

We would be pleased to inform you of the results of your investigations and, certainly, if we identify any abnormality of your hearing or balance functions, we would inform your General Practitioner.

This project has been reviewed by the National Hospital for Neurology and Neurosurgery and the Institute of Neurology Joint Research Ethics Committee.

**If you think you would like to take part in the study, please contact us so that we can discuss it with you and arrange a time for you to come to our testing center. Please call Dr Robin Cox on 01773 208636. You can also email Dr Cox to [Robin@rafcox.go-plus.net](mailto:Robin@rafcox.go-plus.net) , and we will contact you.**

Thank you in advance for your time and attention.

With kind regards

Yours sincerely

The Investigators:

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