

## **Airwave Health Monitoring Study Information Leaflet for Health Screening**

Dear participant,

Airwave is a digital radio communications system designed for the Police service in England, Wales and Scotland. With backing from the Police Federation, UNISON and Police management, the Airwave Health Monitoring Study will examine possible long term health implications for Police personnel related to use of this technology. The Police Federation's position on Airwave and health is at: [http://www.polfed.org/PFNews\\_Airwave\\_Issue24.pdf](http://www.polfed.org/PFNews_Airwave_Issue24.pdf).

Please take the time to read through this information letter to learn about what will be involved at the health screening clinic. If anything is not clear, or if you would like more information, please call the clinic administrator who booked you for the health screen. If you have any questions or comments about the Study generally, please contact a member of the Medical Research Team at the address above.

Thank you for your assistance and for participating in the Airwave Health Monitoring Study.

Yours faithfully

Professor Paul Elliott FMedSci.

## Why do we need Airwave health monitoring?

Some people have been concerned about the possible health effects of mobile phones for several years now. In 2000, The Independent Expert Group on Mobile Phones under the Chairmanship of Sir William Stewart looked into the matter, and published a report *Mobile Phones and Health* (the “Stewart Report”).

The Stewart Report found no obvious health effects associated with mobile phones, but it did mention that radio signals with modulations around 16 Hz might have an effect on the body. The report said that the evidence was inconclusive, but did recommend precaution. Because the signals from Airwave (TETRA) handsets contain a modulation at 17.6 Hz, the Home Office asked the National Radiological Protection Board’s independent Advisory Group on non-ionizing Radiation (AGNIR) for further advice. In 2001, AGNIR published a report, *Possible Health Effects from TETRA*, which concluded:

Although areas of uncertainty remain about the biological effects of low level RF radiation in general, including modulated signals, current evidence suggests that it is unlikely that the special features of TETRA mobile terminals and repeaters pose a hazard to health.

The report also recommended further research to clear up any areas of uncertainty. The Home Office accepted all the recommendations, and commissioned further research, of which this Study is part.

## What is the aim of the Study?

The aim is to investigate any possible long term health impacts associated with Airwave use amongst police personnel.

## Who is eligible to be part of the Study?

The Study is open to all Police personnel, including staff employees, and those who do not currently use Airwave. Following a successful pilot in 2004 - 05, the Study is now being rolled out nationally on a force-by-force basis.

## Why should I participate?

The findings made by this Study will provide vital information in assessing whether Airwave is harmful to health, and will inform future treatment of illness, health promotion, diagnosis and prevention of disease.

## Who is conducting the Study?

The Study is being conducted by the Department of Epidemiology and Public Health at Imperial College London. The Principal Investigator is Professor Paul Elliott. The project is funded by the Home Office and has the support of the Police Federation, Unison, and the Police force.

## Has the Study been ethically approved?

Yes, the Study has been approved by the North West Ethics Research Committee, an NHS body. The Study also has its own Ethics and Governance Committee (EGC) that includes independent academic experts and a “lay” member nominated by the Police Federation.

## Why carry out a health screen?

It is possible to participate in the Study by just completing the enrolment questionnaire. However, the health screen allows us to assess your current state of health, and this will greatly inform our analysis.

The Health Screen takes approximately 90 minutes in all.

We will send you detailed results of your health screen, and provide you with background information on the tests we have carried out. No-one outside the Study team and (only with your consent) your GP will see the results, which are confidential between us.

## What happens at the clinic?

When you arrive for your appointment, a nurse will explain the health screen to you and answer any questions or concerns you may have. The nurse will then ask for your written consent to take part.

The clinical procedure involves the nurse recording various details about you, taking measurements and blood samples. At the clinic we will ask you to complete a computer-based questionnaire about your general health and use of Airwave. We will also ask you to carry out a computer-based cognitive test.

In summary this is what happens at the clinic:

- Personal details (name, address, GP address etc.);
- Any current or prior medical conditions, medications you are taking, and questions about lifestyle;
- Blood pressure, height, weight, waist and hip size;
- Body composition (proportion and distribution of fat in your body);
- An electrocardiogram (ECG) and pulse wave velocity (PWV) measurement.
- Urine and blood sample;
- A computer-based questionnaire about your general health and use of Airwave;
- Perform a computer-based cognitive test.

Full details of the purpose of each test and the significance of the results are explained in the booklet *A Guide to Understanding Your Results*, which you will receive at the clinic. It provides background on each of the measurements in non-technical language. A copy can also be downloaded at <http://www.police-health.org.uk/docs/FeedbackBooklet.pdf>

Other than providing the blood sample, all measurements are non-invasive.

## What is the Food Diary?

Accompanying this letter is a food diary, which we ask you to complete for seven consecutive days before your appointment, and bring it with you to the clinic. Diet is an important determinant of your health, and the food diary will enable us to collect information on your dietary habits.

### **What is the *Airwave Usage Diary*?**

Although we obtain electronic records of the number of calls and total duration of Airwave usage, this is not always a comprehensive record of your own use of Airwave. For example, we cannot currently track use of pool radios. We have therefore included a “diary” that allows you to summarise your use of Airwave. We ask you to complete it for a week prior to your appointment, and to bring it with you when you attend the clinic.

### **Why perform a cognitive test?**

*Cognition* refers to a range of brain functions, including the ability to learn and remember information: problem-solve; focus, maintain, and shift attention as necessary; understand and use language. We ask you to take a cognitive test which will help us to assess if there is any association between the use of Airwave and cognitive functions of the brain. The test runs on a tablet computer and will take between fifteen and twenty minutes.

### **What feedback will I receive from the health screen?**

You will receive a detailed report that will contain all of the results from your visit that are useful in assessing your current state of health. This includes the physical measurements, blood tests and an assessment of your ECG. There are no results of analysing your urine as we do not perform any analysis on it at this stage.

For each result, we state the recommended or “reference range” that is believed to be typical for healthy people in the general population.

We can send a copy of your results to your GP if you ask us to. Please bring their address (including postcode) with you.

Apart from your GP, no-one outside the Study team will see your results, which are confidential between us.

### **Will you tell me if you find a problem with my health?**

Whilst comprehensive, the health screen results are not enough, on their own, to diagnose an illness. Only your GP can do this, after taking into account all aspects of your health. We are not allowed to provide specific advice to you about the significance of your results.

Nevertheless, there are certain conditions, such as high blood pressure, where the nurse will advise you to visit your GP. And in exceptional circumstances – if we suspect an undiagnosed recent heart attack, for example - we may recommend that the participant go to Accident & Emergency.

### **What if researchers find new information about my condition?**

Usually the information discovered during research will not have any implications for you personally. However if any such findings are of clinical significance we may inform your GP/clinical care team. They would then judge the relevance of the findings to your care and contact you for further testing or refer to a specialist as appropriate.

### **When will I receive my results?**

We aim to send back results within two months of your appointment, although this may be extended if you are not able to provide a blood sample at your first appointment and agree to return for a second attempt. Please contact us if you have not received your results after three months.

Participants whose results are late often worry that the delay is because of problems with their health that have been picked up during the screen. This is never true. If your results are delayed, it will be because of administrative or quality control delays within our small team.

## What is a Repeat Screen?

We ask approximately every 20<sup>th</sup> participant to return for a second health-screen within three months of their first appointment. This is to assess the level of natural variability of individuals' results over relatively short periods of time, and contributes to the accuracy of the research. It is entirely optional whether you agree to have a repeat screen, and will not affect your existing participation in the Study.

## Why do you need my written consent?

Your participation in the Study is voluntary. By signing the *Airwave Health Monitoring Study, Consent Form*, you are confirming your willingness to take part in the Study, to allow us to carry out the clinical procedures, and to follow up your health in the long term.

We ask you to complete a *Police Personnel Records Consent Form*, which will be filed with your Personnel Records, so that your Police force can grant us access to certain data contained in your Police personnel files that are relevant to this Study.

You must provide the above consents to have a health screen as part of the Study.

If you are unable to provide a blood sample at your first appointment, and you agree to come back for a second attempt, we will ask you to complete a *Consent Form for Re-bleed*, which is a cut-down version of the main consent form and is specific to the blood sample taken at that appointment.

We also ask your consent to store your blood and urine samples for long term analysis by this Study and other ethically approved medical research. Although this is optional, it will greatly enhance the value of the research if you do consent to this.

## How do you follow up my health records?

We follow up your health records on databases authorised by the NHS to hold these data. Our main sources are the cancer and mortality registers in England & Wales, and Scotland. We also intend to obtain information on Hospital Episodes (HES). We may apply to use other NHS databases as they become available, but any such application will be subject to approval by the relevant NHS committees.

## Why do you need access to my personnel records?

We ask for date-of-birth details and home contact (in case the address you give us is transcribed inaccurately); we also ask for Job function, educational history and ethnicity which are important in controlling for occupational or socioeconomic factors. We need to know if you change Police force or retire, so that we can accurately track your usage of Airwave. Information on sickness absence and records of the date and reason for retirement allow us to track incidence of general ill-health that may be caused by use of Airwave, but which are not picked up in NHS records.

## Confidentiality and privacy

There are no circumstances, short of a court order, where we will discuss any of the information we hold about you with any third party. This prohibition includes the Home Office and your police force.

This research project is registered for data protection and the requirements of the Act apply in full. All personal information collected during the Study will be used solely for medical research purposes and will be stored and disposed of in a secure manner.

The long term store of data used by the Study is a "Private Network" of computers run by Imperial College which is dedicated to the Study and has no external connections (researchers are unable, for example, to access the Internet from the Private Network). The facilities have been reviewed and considered suitable by a police agency.

## **Can I withdraw from the Study?**

Yes, you can withdraw from the Study at any time without giving reasons. You will have to inform the study team of your wish by phone or email or letter. We will then send you a *Withdrawal from Study Form* which has to be signed by you and sent back to the research team at Imperial College.

## **Can I claim compensation if I am harmed during the screen?**

Imperial College London holds insurance policies which apply to this Study. If you experience harm or injury as a result of taking part in this Study, you will be eligible to claim compensation without having to prove that Imperial College is at fault. This does not affect your legal rights to seek compensation.

If you are harmed due to someone's negligence, then you may have grounds for a legal action. Regardless of this, if you wish to complain, or have any concerns about any aspect of the way you have been treated during the course of this Study then you should immediately inform the Investigator. The normal National Health Service complaint mechanisms are also available to you. If you are still not satisfied with the response, you may contact the Imperial College Clinical Research Office.

## **What happens to my blood and urine samples?**

Samples of blood and urine collected from each participant are placed into different tube types to allow a wide range of analysis to be carried out at the laboratory. Some of the blood tubes are spun in a centrifuge to allow immediate separation of the blood into its constituent parts.

At the end of each day, the samples are transported to our laboratory in London for detailed analysis on the following day. Once analysis has been completed, the remaining samples are placed in freezers for long term storage. Samples from participants that have not granted consent for long term storage are destroyed.

All of your samples will be stored in barcoded tubes. The database that allows a barcode to be linked to identifiable participants is held at a separate, secure location, which cannot be accessed remotely.

## **Who will have access to my samples and data?**

Imperial College and other research institutions both academic and commercial may carry out research using the data and samples provided by the Study, including genetic analysis to identify genes that may predispose people to disease. You will never be personally identified to any researcher outside the Airwave Health Monitoring Study team. The results of any research that is published, whether by Imperial College or anyone else, will never identify you.

Neither the Home Office nor your employer will be able to access your samples or data.

## What is Airwave Health Monitoring Study Tissue Bank?

A tissue bank is an ethically approved collection of human tissue or other biological material, which is stored for potential research beyond the life of a specific project. The Airwave Study TB is registered as a sub collection under the Human Tissue Act (HTA) license held by Imperial College Healthcare Tissue Bank (ICHTB).

While the primary aim of the Airwave Study is to investigate long term health effects from the use of TETRA, the rich resource of samples and data also provides a valuable opportunity for broader research into common diseases affecting police officers and staff.

The primary aim of this tissue bank is to provide a resource for collaborative research aimed at devising new treatments and therapies for a range of medical conditions. More information on the research projects will be published on our website.

If you give consent for long term storage, your samples will be included in the TB.

The tissue bank sample and data will only be used for research after review at two levels. The Airwave Study Access Committee (which has representation from Police Federation) will review each application and make sure that it meets the terms of consent of the donors and passes a scientific evaluation. It will then be passed on to the ICHTB management committee, who will review the proposal for approval and make suitable recommendations for release of sample and data.

All sample or data given to third party researchers will always be anonymised and you will not be identifiable.

### Further information

If you need more information about the Tissue Bank, please write to:

The Tissue Bank Manager,

Imperial College Healthcare NHS Trust

11th Floor, Laboratory Block Charing Cross Hospital

Fulham Palace Road

London W6 8RF

Email: [tissuebank@imperial.ac.uk](mailto:tissuebank@imperial.ac.uk)

Website: [www.police-health.org.uk](http://www.police-health.org.uk)

**Thank you very much for taking the time to read this information**