

WORKSHOP

Airwave Health Screening

HEALTH • SAFETY • TRAINING

worKare

...has it's finger on the pulse!



Lorraine Jenkins OStJ TD

BEd(voc) Hons MBA RN
OHNC FETC LCGI FCMI

Managing Director

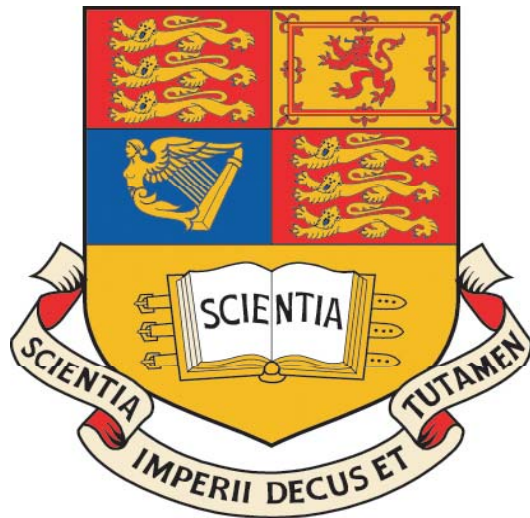
www.workareltd.co.uk

Tel: 01656 649227

A Home Office/Imperial College initiative



Imperial College
London



Airwave Health Screening Programme



Airwave Health Monitoring

Commissioned by the Home Office
(May 2003)

Airwave- based on Terrestrial
Trunked Radio(TETRA) technology

Addresses the needs raised by
NRPB's Advisory Group on Non-
Ionising Radiation report on "possible
health effects from TETRA"

Historical Context

- Studies(1975) showed that Radio Frequency fields of 16Hz caused a loss of Calcium in the brain- no proven detrimental health effects
- Terrestrial Trunked Radio(TETRA) has a pulse frequency of 17.5 Hz

Current trials

- Underway with BT Airwave and Police
- All emergency services in future
- System of Base Stations and Mobiles
- Exposure will be occupational use of hand held portables
- Exposure from Base Stations is minimal

Report Conclusion

- Findings generally have been contradictory
- No proven associated health risk has been identified
- Uncertainty remains but it was felt that it was unlikely to pose a hazard to health
- NRPB Report first published in 2001

Why is the Health Monitoring needed?

- No previous epidemiological research had looked at TETRA and health
- Long term effects were largely unknown
- Consideration of latency period for clinical onset of disease (especially cancers)
- Potential to look at the health of all Police personnel in relation to TETRA use

Aims of the Research Programme

- Long term follow up of health of Police Force to investigate possible long term effects associated with Airwave use
- Examine the relationship between Airwave use and psychological/physical symptoms
- Also a short term study to investigate the effects of Airwave on neuro-cognitive function in the brain

Who is involved?

- All Police in Wales, Scotland and England(S Wales Constabulary were the first to sign up)
- Voluntary enrolment but the study does need large numbers for the research base
- Estimated enrolment rate >40%
(Take up rate for S Wales is over 60%)

Enrolment process

- Force targeted and questionnaires sent out to all personnel asking if they would like to participate.
- Returned to Imperial College, scanned and database compiled
- Database sent to relevant Screening Organisation(Workare) for appointments to be made

Rationale for screening

- Comprehensive health profile- data on clinical and lifestyle factors
- Highlight possible interactions between Airwave use and specific measurements
- Provides a resource for future research

Internal Support for screening

- Force, Association of Chief Police Officers and Unions actively support the screening

Incentives for screening

- Confidential short term clinical feedback
- Participants get a free and confidential health screen worth £ 400 commercially
- Peace of mind

Content of health screen

- Lifestyle input on laptop computer
 - Blood Pressure
 - Weight
 - Height(Standing and Sitting)
 - Waist measurement
 - Hip measurement
 - Body composition(Tanita Machine)
- cont next slide

Screening content cont-

- ECG (heart trace)
- Blood taken for analysis(25 different analysis carried out)
- Urine test(sent away)
- Computer notebook detailed questionnaire on lifestyle and work related aspects(radio use)
- Duration 60 mins in duty time

Data

- Laptop data downloaded by Nurse at end of each day direct to Imperial College
- Notebook input downloaded onto USB stick and sent to IC
- ECG data downloaded direct to Glasgow Coronary Care Unit
- Blood and Urine samples collected by Courier and sent to Northwick Park Hospital overnight

Results

- A report is sent direct to participant at their home(and to GP if they wish)
- A report booklet is given to them at the time of the screening to read in conjunction with results report.
- NO INFORMATION IS SENT TO THE FORCE INVOLVED-it all remains confidential
- All participant information is recorded by a bar code system

Good Practice SWP/Workare

- Health advice is given at time of screen (we work to IC Protocols for certain referrals)
- Referrals to GP recommended where appropriate
- Rapport established with Force OH Department, liaison visits made by MD to OH Dept for update on trends
- Participants encouraged to speak with OH dept where appropriate

SWP Statistics

- Based on our collection data
- 2.400 personnel screened to date:
- 231 abnormal/borderline ECGs- 195 no action required, 31 referred to GP for further action, 5 referred immediately to a Cardiologist(1 of which has had Open Heart Surgery and 1 a Pacemaker inserted)
- 350 BP's above referral level of 150/80

Workare Police Screening Team

- Approached direct by IC in May 2005 to be ready to go initially by July(but postponed until Sept at Police request)
- Set up from scratch
- First to go live
- Team of nurses- 8-10 on rota basis
- Project administrator(full time)
- Reception area and waiting area
- 2 clinical rooms fully equipped

Logistics

- 6 screens per day per room
- 4 days per week- lab closed on a Friday night
- 48 screens per week
- Specialist training and updating arranged by Workare e.g. Venepuncture, ECG and. Computer competence

Future

- Commencing the Gwent Force in February followed by Dyfed Powys
- Expertise of staff have enhanced the Company/s capabilities
- Extended our portfolio of services

Lessons learnt

- Technology cannot be trusted!
- There's always more to things than first thought
- A good administrator with technical competence is essential
- A team of flexible, enthusiastic staff to provide the screening expertise is critical
- Keep smiling

Diolch Yn Fawr



Thank You