THE UNIVERSITY OF QUEENSLAND

PARTICIPANT INFORMATION SHEET

Project Title: Occupational hearing loss induced by solvents and noise: development of new strategies for hearing loss prevention programs in the workplace

Lay Title: Hearing loss induced by solvents and noise

Chief Investigator:

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You are invited to take part in this research project.

These pages contain detailed information about the research project. The purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part in it.

Please read this information carefully and feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend. Feel free to do this.

Once you understand what the project is about and if you agree to take part, you will be asked to sign the Consent Form. By signing the Consent Form, you indicate that you understand what is involved and that you give your consent to participate in the research project.

You should keep this copy of the Participant Information as a record.

PURPOSE AND BACKGROUND

Current research evidence demonstrates that exposure to chemicals such as organic solvents may induce hearing difficulties. This means that persons exposed to these chemicals may encounter problems detecting sounds, localising the sound source or understanding what other people say especially when there is background noise. Research evidence also suggests that when persons are exposed to chemicals along with noise then the hearing difficulties may be worse than the ones induced by noise exposure alone or chemical exposure alone. However, our knowledge regarding how we can identify these hearing difficulties at an early stage in order to avoid further hearing difficulties, is still limited. Also, there is still not enough understanding in terms of which levels of exposure to chemicals (with or without the presence of noise) are safe for hearing health.

The purpose of this research is to gain knowledge about which clinical procedures are sensitive to detecting early hearing problems induced by the combined effects of solvents and noise, or induced by solvent exposure alone. It is also the purpose of this research to determine the safe levels of solvent exposure recommended to maintain hearing health.

You are invited to participate in this research project because you are exposed to solvents in your workplace. A total of approximately 54 solvent-exposed persons and 54 non-exposed persons will participate in this project.

WHAT WOULD I BE REQUIRED TO DO?

You will be required to attend the Audiology Clinic at the University of Queensland (UQ) in St Lucia on two separate occasions. The first appointment will be scheduled on a work day prior to starting work. Then, your second appointment will be scheduled on the same work day directly after finishing work. Each session at the Audiology Clinic (UQ) will take approximately 1 hour. You will also be asked to provide a sample of your urine at the second session. Urine samples will be obtained in order to determine your absorbed level of exposure to solvents.

Details of the procedures

If you decide to take part in this project you will be firstly required to read and sign (if you agree) a Consent Form. After that, you will be asked a number of questions regarding your general health, lifestyle, occupational history and details about possible chemical and noise exposure. Time needed 10 minutes.

Following this a hearing evaluation will be carried out twice.

1. Amsterdam Inventory for Auditory Disability and Health. This is a 30-item self-report questionnaire. You will be required to complete each of the 30 questions according to your listening experience in different situations/contexts. Time needed: 5 minutes.

2. Otoscopy: Your ear canals will be examined using an otoscope (ear light) to ensure there are no blockages. Time needed: 2 minutes.

3. Pure tone audiometry: Sounds will be presented through headphones and you will be asked to respond each time you hear a sound. Time needed: 10 minutes.

4. Tympanometry: The pressure of your middle-ear will be tested. This is checked by placing a probe into your ear canal and air pressure is then increased and decreased. Time needed: 15 minutes.

If you have no problems in your outer and middle-ear, then we would be able to continue with further testing. If a problem in either your external ear canal (e.g. excessive wax) or middle ear (e.g. some sort of inflammation) is detected, you will be referred to your usual medical provider. We will be able to continue with the testing once your outer/middle ear problems have ceased.

5. Otoacoustic emissions. A probe tip will be placed into your external ear canal. You will hear some sounds. You are required to remain quiet and relaxed while seated on a chair. Time needed: 15 minutes.

You are free to withdraw from the study at any time for any reason and are under no obligation to the researchers.

WHAT ARE THE POSSIBLE BENEFITS OF MY PARTICIPATION?

Your participation in the project is not likely to directly benefit you in any way. However, you will receive a free hearing test and a report on your hearing health. Your participation could potentially reduce hearing disability among adults who are exposed to chemicals in Australia in the future (e.g., through improved early detection procedures).

ARE THERE ANY POSSIBLE RISKS?

It is possible that the testing may reveal deficits to hearing that you may not have been aware of. The impact on employment, therefore, cannot be completely discounted.

PRIVACY, CONFIDENTIALITY AND DISCLOSURE OF INFORMATION

Your confidentiality will be maintained at all times as far as the law allows. You will be assigned a case number with which all your personal information will be labelled. Files will be kept in locked filing cabinets in locked offices. Only the research team will have access to your name and demographic details. You are free to request access to your own information at any stage.

You will be personally advised of your test results at the time of testing and you can ask for feedback on the research project findings to be sent to you on completion of the project.

All data collected during this study will be stored in a locked filing cabinet within the School of Health and Rehabilitation Sciences, The University of Queensland. Electronic copies will be password protected.

Participant data will be kept for a minimum of seven years after the completion of the study in accordance with the policy statements of the Australian Vice-Chancellor's Committee and the National Health and Medical Research Council on Scientific Practice. After 7 years, all data will be disposed in accordance with the Australian Code for the Responsible Conduct of Research (pages 2.1-2.3).

If there is any aspect of the information provided here that you do not understand, please do not hesitate to ask for further explanation from any of the researchers involved.

This study has been cleared by the Medical Research Ethics Committee of the University of Queensland in accordance with the National Health and Medical Research Council's guidelines. You are of course, free to discuss your participation in this study with project staff (contactable on 07 3102 3181). If you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Officer on 07 3365 3924.

If you have any additional questions, please contact Miss Laura Sheridan (Tel 3346 7489, email: l.sheridan@uq.edu.au) or Dr Adrian Fuente (Tel 3102 3181, email: a.fuente@uq.edu.au)

Thank you for your interest in this research project.

Dr Adrian Fuente