

UON Key Risk Area: KRA 1.6

Noise Management Guidelines

1. Purpose

The Noise Management Guidelines provide direction for reducing as far as practicable, the risk to people's hearing due to exposure to hazardous noise and/or ototoxic substances in the workplace and to ensure compliance with the [NSW Code of Practice: Managing noise and preventing hearing loss at work](#).

2. Scope

This document applies to all faculties, divisions, and organisational units of the University of Newcastle and its controlled entities.

3. Definitions

In the context of this document, the following definitions apply:

- **Noise:** any sound that is audible to a person;
- **Hazardous noise:** noise that exceeds the National Standard for exposure to noise in the workplace. The National Standard for exposure to noise in the workplace is an average daily level of 85 decibels (A - weighted) across a duration of 8 hours in the workplace. Note that having to shout to be heard at arm's length indicates that a sound level of approximately 85 dB(A) is present. For peak noise incidents (one-off noise events), the National Standard is 140 decibels (peak linear level). These levels are defined as the maximum acceptable levels for noise.
- **Ototoxic substance:** a chemical or material that can also cause hearing loss or exacerbate the effects of noise on hearing. A list of ototoxic substances is provided in Attachment A.
- **Leader/Supervisor:** Any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects.

- **Worker:** As defined in the [NSW Work Health & Safety Act 2011](#), workers include employees, conjoints, students on work experience, contractors, sub-contractors and their employees. Staff, conjoints, students on work experience, and contractors may be referred to collectively as workers, or separately as staff, conjoints, students, or contractors.

4. Responsibilities

4.1 Leaders/Supervisors

Leaders/Supervisors are responsible for ensuring that:

- Statutory requirements are complied with;
- Preference is given to purchasing items of equipment or plant that do not exceed the general 85 dB(A) limit or 50dB (A) limit for laboratory, office and computing equipment;
- Noise control measures and management strategies are implemented whenever necessary;
- All levels of management and staff members and other workers, students and visitors are aware of the control measures in place to reduce exposure to noise;
- All staff members and other workers, students and visitors are directed to cooperate in using agreed safe work practices;
- Information on noise, the risks of exposure to noise and the appropriate control measures are readily accessible and disseminated in a manner appropriate to the workplace;
- A comprehensive personal hearing protection program, including the selection of personal hearing protectors, and instruction of employees in their correct use and maintenance, is implemented;
- Workers, students and relevant others receive appropriate training and education relating to hearing conservation when it is required;
- A [Health and Hazard Assessment Questionnaire](#) (HHAQ) is completed for each position type that is recruited in their area (including casual appointments) and that excessive noise levels and/or any chemical use relating to the work area are included so that the University Health Service has this information when conducting the Pre-placement Medical Assessment;
- Audiometric baseline and ongoing testing occurs for staff members who are identified as being exposed to excessive noise levels or the use of ototoxic substances in their work area following advice from the University Health Service.

4.2 Workers, Students, and Others

- Comply with all statutory requirements and Standard Operating Procedures (SOP) relating to their work;
- Attend information and training sessions relating to noise and chemical exposure when required;
- Use and maintain personal protective equipment (PPE) as required.

5. Procedure

5.1 Noise Level Assessment

An initial assessment of workplace noise can be made by inspection and observation. An indication of noise overexposure is where there is difficulty having a conversation between people who are distanced an arm length apart without shouting.

Using the initial assessment as an indicator, a noise level recording should be undertaken by a competent person using an appropriate noise level meter.

Where the readings from the noise level meter indicate there are noise exposures over the limit, a noise survey shall be arranged using an occupational hygienist. This will involve static or area monitoring and personal monitoring with selected employees wearing noise dose meters for a shift.

A report will be submitted by the occupational hygienist that will include a noise map indicating the areas where the noise is above the statutory limit. The report will also include the following information:

- The areas in the workplace where the exposure occurs;
- The occupation or job/task of the persons exposed;
- The frequency of exposure.

Additional information can be obtained from:

- Information from manufacturers and suppliers who have a legal responsibility to provide appropriate information regarding the noise output of plant and equipment;
- Hazard reports;
- Consultation with employees.

5.2 Risk Control

Where the noise levels fail to meet the legislative requirements, all practicable action must be taken to control and reduce noise emissions in that area. Methods of noise control are prioritised below according to the hierarchy of risk control options. Staff who perform the work task should be consulted with regarding control measures.

Hierarchy of controls for managing hazards and risk	
Elimination	Eliminate the equipment or the task.
Substitution	Use alternative equipment that is quieter.
Isolation	Separate the employee from the noise by enclosing noisy machines in acoustic cladding or providing sound proof control rooms.
Engineering controls	Make physical changes to the equipment to reduce noise by replacing worn parts or reducing vibration.
Administrative Controls	Adopt work procedures that minimise exposure to the noise to individuals e.g. job rotation; training; signage; audiometry programs.
PPE	Provide devices to protect hearing.

5.3 Evaluation of Control

Ongoing evaluation and assessment of noise controls are undertaken in consultation between leaders/supervisors and staff directly involved in the work area identified as having a noise exposure. The results of this assessment should be communicated to involved parties.

Evaluation can take place in the following ways:

- Observation by leaders/supervisors, staff, Health and Safety Team members during visits to the area;
- During monthly site safety inspections;
- During internal audits.

5.4 Consultation

Consultation on noise hazards is to be undertaken between leaders/supervisors and staff through direct discussion and the Health and Safety Committees. This consultation is to occur:

- As early as possible in the planning/design phase of the introduction of new or modified work areas, new plant and equipment, changed work arrangements that could impact exposure to noise or in the review of existing noise management strategies;
- When determining the approach and methods to be used in assessing noise hazards, and when decisions are being made on appropriate control measures;
- When the effectiveness of implemented control measures are being reviewed.

5.5 Training

All staff, students and others who may be exposed to excessive noise at work should be given initial and ongoing training to promote an understanding of health effects caused by noise and the risk controls in place, including the need to use hearing protection.

In addition to staff, students and others exposed to noise in the workplace, persons responsible for designing, scheduling, and organising and lay out of work should also attend training.

Training should cover the following:

- What noise is, the range of health effects due to noise and the social implications;
- The exposure to noise in the relevant workplace and work location;
- The general and specific control measures which are necessary to protect them and other persons who may be affected by their work;
- The requirements of this Guideline;
- Arrangements for reporting defects likely to cause excessive noise;
- When and how to use personal hearing protection and their proper care and maintenance;
- The statutory requirements of the [NSW Code of Practice: Managing noise and preventing hearing loss at work](#).

5.6 Audiometric Testing

An audiometric testing program shall be available for staff likely to be regularly exposed to noise exposure levels in excess of the statutory limit i.e. 85dB(A). The details are as follows:

- Testing will be arranged through the University Health Service and will be undertaken by a trained, competent tester;
- The audiometric testing program shall include an initial test during the Pre-placement Health Assessment and then periodically every two years;
- Prior to audiometric testing employees will be asked to sign an Informed Consent Form so the results of the tests can be made available to the Faculty or Division;
- The test results and their implications shall be explained to the staff member by the tester and if hearing deterioration is detected the employee will be advised to see their medical practitioner for further advice;
- The Faculty or Division will be provided with a report that highlights any hearing deterioration detected and recommendations for improved exposure controls;
- Actions will be taken by the Faculty to ensure staff with work related hearing loss are able to work safely.

5.7 Records

Noise surveys and audiometry records will be kept for a minimum of 30 years. Staff records shall be treated as confidential medical information and be kept in confidential files with restricted access e.g.in medical files in the University Health Service.

6. Attachments

1. Ototoxic Chemicals

7. References

[NSW Code of Practice: Managing noise and preventing hearing loss at work.](#)

[UON HSP 4.1 Risk Management](#)

[UON HSP 4.4 H&S in Design](#)

[UON HSP 10.4 Health Surveillance](#)

Document Summary Table

Noise Management Key Risk Area: KRA 1.6					
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Important Notes:					
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Attachment 1. Ototoxic Chemicals

1. Drugs

- Aminoglycoside as antibiotics (Gentamicin, Kenomycin, Neomycin)
- Salicylates as aspirin
- Quinines
- Loop diuretics
- Anti-neoplastics as anti-cancer drugs (Cisplantin)
- Others e.g. non-steroidal anti-inflammatory agents; antibiotics; antihistamines; cardiovascular, anti-convulsant, anti-depressant and anti-psychotic drugs.

2. Gases

- Carbon monoxide

3. Heavy Metals

- Lead
- Arsenic
- Mercury
- Manganese
- Organotins e.g. Trimethyltin (TMT), Triethyltin (TET)

4. Organic Solvents

- Carbon disulphide
- Trichloroethylene
- Styrene
- Xylene
- Toluene