

TIP sheet

Noise

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Legal requirements – Noise

The OHS Regulation 2001 requires that an employer must ensure that appropriate control measures are taken if a person is exposed to noise level that exceed an 8 hour noise equivalent of 85 dB (A) or the noise peak at more than 140 dB(C).

The RTA Policy 2.17 - Noise Control reflects the following key legislative requirement.

Minimum requirements

- Employers must control workplace noise and carry out noise assessments.
- Noise reduction methods are required if average noise is over 85 dB(A).
- Training must be provided to employees who may be exposed to excessive noise at work.
- If hearing protection is needed, there must be clear warning signs illustrating where and when hearing protection is required.
- Provide appropriate personal hearing protective devices.
- Hearing tests are to be conducted for employees exposed to noise.
- A register of all equipment used and tasks undertaken in a workplace is to be established and forms are to be registered in a Plant Data Base.

- The register is to contain information on:
 - Equipment contained on the List of Noisy Equipment.
 - The noise levels of the equipment or tasks, e.g. previous surveys, product information.
 - The current method of noise exposure control for each piece of equipment or task, e.g. acoustic hoods, personal hearing protectors.
 - The task/s for which the equipment is used, e.g. grinding metal.
 - Environmental factors which may impact on noise exposure eg. working in tunnels, working in the open, type of surface.
 - Other equipment in use within the workplace, .eg. two or more machines located together increase the noise exposure.
 - Whether other people are exposed to the noise from this equipment.
- Identify noisy equipment or work processes that are suspected of emitting a continuous noise level above 85 dB(A), and equipment with a suspected impact noise emission of greater than 140 dB (C) Peak for impact noise.
- Provide a basis for planning noise reduction.
- Identify control possibilities.
- Ensure that if personal hearing protection is required it will provide correct noise reduction.

Risk assessment

A noise assessment should:

- Give you details of where noise levels are excessive in your workplace, and identify individuals exposed to excessive noise.
- Treating the noise at its source, or its transmission path (e.g. substituting with a quieter machine, isolating by way of sound barriers or distance, engineering by use of sound dampeners on the equipment).
- Preventing exposure to noise eg enclosing staff in a noise control booth, training and education, job rotation, job redesign or rosters designed so that as few employees as possible are exposed to noisy operations at any one time and for reduced durations).
- Personal hearing protectors that provide proper noise reduction (e.g. ear muffs, ear plugs).

Risk controls

Adequate noise management can generally be achieved by implementing one or a combination of the following:

Signs & symptoms of hearing loss

- Difficulty in following conversation when there's background noise.
- Intermittent ringing in the ears (tinnitus).
- Difficulty in hearing small (low level) sounds eg; the ticking of a watch.
- Other family members complain about the volume of the TV or radio you listen to.
- If you feel tired or irritable after working in a noisy environment.
- Dull hearing after working a noisy task.

Activity	Activity Description and Noise Level	Activity	Activity Description and Noise Level
	Normal Conversation 60 decibels Max. Time of Exposure: More than a day		Operating a Chainsaw 97 decibels Max. Time of Exposure: 30 Minutes
	Operating a Mower 70 decibels Max. Time of Exposure: More than a day		Using a Hand Saw 100 decibels Max. Time of Exposure: 15 Minutes
	Starting on a Bore Head 80 decibels Max. Time of Exposure: 24 Hours		Using a Hand Plane 102 decibels Max. Time of Exposure: 10 Minutes
	Normal Heavy Machinery 84 decibels Max. Time of Exposure: 10 Hours		Operating a Hand Plane 105 decibels Max. Time of Exposure: 5 Minutes
	Operating a Welder 85 decibels Max. Time of Exposure: 8 Hours		Operating a Hand Plane 107 decibels Max. Time of Exposure: 3 Minutes
	Operating a Chainsaw 91 decibels Max. Time of Exposure: 2 Hours		Using a Hand Plane 120 decibels Max. Time of Exposure: 10 Seconds
	Operating a Power Saw 94 decibels Max. Time of Exposure: 1 Hour		Using a Hand Plane 121 decibels Max. Time of Exposure: 5 Seconds

Use of hearing protection

Instruction must be provided in the correct fitting of all hearing protection to ensure:

- The earmuff must make a good seal around the ear.
- The headband tension must not be reduced. Wear the headband over the top of your head.
- The earmuff cup must be undamaged and must completely surround the ear. Do not put anything under the cushion, as this will break the seal.

Safety Warning Signs

- Safety warning signs are required when noise levels are in excess of a level equivalent to 85 dB(A) over an 8 hour working day. These signs are to be placed at the entrance to the noisy area and attached to noisy plant.
- Safety warning signs inform people that hearing protection must be worn while in the noisy area.
- All safety warning signs are to comply with Australian Standard AS 1319 Safety Signs for the Occupational Environment.

Noise Assessments

Noise assessments are to be conducted where:

- Employees may be exposed to noise that exceeds the standards set in the OHS Regulations.
- Reliable noise data on plant and equipment is not available.
- Workplaces where noise exposure is marginal lower than the standard and there is a change in operating conditions that may increase noise exposure.

Health surveillance

Managers are responsible for organizing hearing testing for their staff.

Service providers are listed in Appendix F of RTA policy 5.3 Health Surveillance.

Hearing tests for RTA staff are conducted principally to:

- Identify those staff who have a hearing disability so that measures can be taken to prevent further hearing damage.
- Monitor the effectiveness of the RTA Hearing Conservation Program.

Criteria for hearing tests

- Where the job requires good hearing to perform usual work activities (ie. working on any site where a staff member needs to be able to hear a shouted command or a reverse beeper alarm).
- Any work environment that requires the wearing of hearing protection as part of the noise control plan.
- When a staff member is known to have a hearing deficit.

Frequency of testing

Testing will occur:

- As a baseline/reference test before commencement of duties in an environment which has identified activities to noise exposure.
- As soon as practicable if a staff member advises of some changes to their hearing eg tinnitus (ringing in ears) to identify if there has been a change in hearing threshold.
- Following exposure to sudden loud noise (acoustic incident).

- For monitoring tests every two years or more frequently if symptoms of noise exposure or results of previous test show a significant threshold shift indicating the need for additional assessment.
- Prior to commencement in a position that has a specific requirement for hearing to perform the inherent duties of the job.

Personal management plan for hearing impairment

Where staff are identified as having significant hearing loss a plan must be developed by the hearing impaired employee's supervisor in conjunction with the employee. An OHS facilitator may provide assistance if required.

Compliance with this plan must be monitored.

References

- [OHS Act](#) 2000 & [OHS Regulation](#) 2001 Part 4.3
- [WorkCover COP](#) – Noise management & protection of hearing at work
- [RTA OHS Policy 2.17](#) – Noise control
- [RTA OHS Policy 5.3](#) – Health surveillance
- [RTA OHS policy 4.0](#) – PPE
- RTA fact sheet – Hearing
- RTA health surveillance guide – Hearing

Understanding Acceptable Exposure

You can measure noise levels with a sound level meter. Acceptable exposure depends on both the level of noise, and the amount of time you are exposed.

dB(A)	Duration	
85	8	Hours
88	4	
91	2	
94	1	
97	30	Minutes
100	15	
103	8	
106	4	
109	2	
112	1	Sec
115	30	
118	15	