

DRAFT Noise – Assessment Inspector Hazardsheet

The 5 steps of assessment can be used to systematically work through how the workplace is managing noise as a risk, and whether they meet their obligations under the Health and Safety in Employment Act 1992.



STEP 1. IDENTIFYING POTENTIAL HAZARDS

Look out for: loud noises, constant noise, difficulty hearing someone 1m away, ringing in ears, hearing protectors in use, hearing protection signage, moving machinery, chainsaws, mixers and banging objects, vibration hazards.

Noise can cause a range of health issues including temporary threshold shift (TTS), tinnitus, recruitment, masking, NIHL. Losing hearing affects a person’s ability to read, write, listen, communicate, hold steady postures and stay vigilant.

Duty-holders knowledge and understanding

s7(1)(a) Preliminary noise surveys, or a ‘walkthrough survey’ should be carried out to identify possible noise hazards.

Regulation 11: Employee exposure to an eight-hour equivalent continuous sound pressure level ($L_{Aeq,8hr}$) of 85dBA and peak sound pressure level of 140 dBA, regardless of PPE.

Standard: AS/NZ 1269 ‘Noise in the workplace - Approved Code of Practice’ (2002)

STEP 2. ASSESSING THE SIGNIFICANCE OF THE HAZARD

Has the employer taken the following into account? Intensity, duration and frequency (pitch) of the noise.

s7(1)(c) Employers should arrange for detailed noise surveys to be carried out by a competent person (e.g. someone with training and experience) to determine whether the noise risks (identified during a preliminary assessment) are significant.

STEP 3. IMPLEMENTING CONTROLS

Hierarchy of controls	Controls
Eliminate	<ul style="list-style-type: none"> Eliminate noise at source Eliminate the need for the noisy process
Regulation 11: Where elimination is not possible the employer must communicate that noise is a hazard, the hearing protection necessary and where the protection is available.	
Isolate	<ul style="list-style-type: none"> Substitute a noisy machine for quiet one Buy quiet Use noise enclosure to surround and contain noise e.g. sound proof control room
Cost of not controlling at source: ACC, hearing protectors, administrative costs for subsequent noise assessments, audiometric tests and ensuring protection is worn, possible compliance costs.	
Minimise (level 1)	<ul style="list-style-type: none"> Reduce noise to below exposure limits e.g. by modifying a process or equipment Place machinery or processes in locations that reduce reflected noise Reduce exposure times and move noise sources away from people Use noise absorption materials Block the sound path Prevent vibration
Minimise (level 2)	<ul style="list-style-type: none"> Job rotation Properly fitted earplugs, earmuffs Regular monitoring Warning signage Maintenance of plant, equipment and environment Training, information, supervision and monitoring (see below)

Training, information and supervision

Has the employer trained any person exposed to excessive noise, managers and supervisors, purchasers and staff with input to workplace design? Training needs to be refreshed at regular intervals and elements reinforced following accidents or violations of rules.

Clear information and training should be provided about:

- Overview of noise, the hearing mechanism and hearing protector programme

- The reasons for wearing protection, the importance of wear time and consequences of removal
- Control measures in place to reduce noise exposure
- Locations and times where hearing protection must be worn. Locations of equipment
- Use of protectors and arrangements for selection, fitting, and replacement
- Maintenance, cleaning and storage of protectors
- Areas where it is needed, signs to identify the areas, and which protection types are suitable for each area.

Appropriate supervision is essential to ensure employees understand and follow correct safety procedures.

STEP 4. MONITORING AND MEASURING

a) Employers should undertake regular inspections/audits of:

- i) **Noise levels**
 - Regular walkthrough surveys should be carried out to determine tasks, processes or areas require more detailed assessment. Where potential noise hazards exist detailed assessments should be completed by a competent person. This should include assessment of full shift exposure (e.g. dosimetry) for comparison against the standard ($L_{Aeq,8hr}$).
 - These should be carried out at least once every 5 years or following any change in the workplace that may affect noise exposure e.g. installation/removal of plant or equipment, increased workload or machine speed, change to building structure, change to working arrangements, new process, when requested by a H&S Inspector or an employee.
- ii) **Personal Protective Equipment (PPE)**
 - Stocks and availability of hearing protectors should be maintained and stored in a designated area. If they are for multiple use, there should be processes for cleaning and inspecting before next use.
- iii) **People**
 - Safety observations can be used to monitor if operators are following safe operating procedures (e.g. wearing PPE).

b) Health monitoring (audiometry)

- i) **s10(2)(e)** Employers must arrange for hearing tests (audiometry) to be carried out on all employees who work in an area with hazardous noise. These must be done by a competent person when an employee starts work (baseline test), and at intervals of, as a minimum, 12 months.
- ii) Employers should take all practicable steps to gain employees' consent to health monitoring when it is required. Employers must provide the results of any health testing to the employee. Health monitoring can be included as a condition in employment agreements.
- iii) Worksafe must be notified when the audiometric testing first reveals noise induced hearing loss (serious harm) the can be attributed to noise at work in excess of exposure limits.

c) Investigating accidents/incidents

- i) Any accidents should be recorded in an accident register, which should be reviewed on regular basis to spot trends and patterns regarding people, processes, work areas, plant and equipment. People with hearing issues are far more likely to have accidents than those without. If a pattern of incidents occurs employers should consider that hearing loss could be a contributing factor.

d) Worker engagement

- i) Operational staff are instrumental to continuous hazard identification. Staff should be encouraged to inform managers of noise hazards they are concerned about, be involved in noise assessment and report any noticeable deterioration to their health.
- ii) Talking point sessions relating to the noise hazards at the workplace are a great way to bring health and safety to the attention of workers.

STEP 5. REVIEWING THE EFFECTIVENESS OF CONTROLS AND SYSTEMS

Review is central to continual learning and improvement of health and safety outcomes.

- Are controls reviewed regularly to check that they are still adequate?
- Is corrective action taken when incidents/accidents/audits/inspections/health monitoring show current controls aren't adequate?
- Are arrangements reviewed when introducing new equipment, plant or processes?

DOCUMENTATION TO REQUEST AND VERIFY

The following examples are documents a workplace could produce as evidence that they have met their legal obligations.

Job safety analysis	Inspection records	Maintenance records	Training records
Investigation reports	Incident/accident register	Breakdown log books	Health test results
Manufacturers information	Safe operating procedures	Health and safety policy	Employee surveys
Corrective action reports	Manufacturers specifications	Fit testing	Noise surveys/assessments