

Hazardous Work – Noise & Hazardous Manual Tasks



Noise

WHS Regulations Chapter 4 Part 4.1

Exposure standard for noise, in relation to a person, means:

- (a) the LAeq,8h of 85 dB(A); or
- (b) the LC peak of 140 dB(C).

LAeq,8h means the **eight-hour equivalent** continuous A-weighted sound pressure level in decibels (dB(A)) referenced to 20 micropascals, determined in accordance with AS/NZS 1269.1.

LC,peak means the C-weighted **peak** sound pressure level in decibels (dB(C)) referenced to 20 micropascals, determined in accordance with AS/NZS 1269.1.

Examples of activities and their noise levels

Activity	Noise level	Maximum time of exposure
Normal conversation	60 decibels	More than a day
Driving a car	70 decibels	More than a day
Standing on a busy road	80 decibels	24 hours
Operating a power tool	94 decibels	1 hour
At a rock concert	100 decibels	15 minutes
Near a crane	102 decibels	10 minutes
Using a nail gun	120 decibels	10 seconds

Hazardous Manual Tasks

WHS Regulations Chapter 4 Part 4.2

In determining control measures for hazardous manual tasks, the PCBU is required to consider:

- The postures, movements, forces and vibration relating to the hazardous manual task;
- The duration and frequency of the hazardous manual task; and
- The workplace environmental conditions that may affect the hazardous manual task or the worker doing it e.g. weather, surfaces to be crossed, lighting, obstructions in the pathway;
- Design or layout of the work areas e.g. workstation design, space, working heights, working position;
- Systems of work e.g. workload and pace, rest breaks, resources and support;
- Nature, size, weight or number of things involved in the task e.g. loads, people or animals being handled, tools and equipment used;
- Pre-purchase of equipment e.g. suitable for task, handling, delivery and storage requirements;
- The work environment e.g. vibration, temperature and humidity, lighting and floors and surfaces;
- Use of mechanical aids e.g. use of conveyors, hoists, turntables, pumps or forklifts; and
- Administrative controls e.g. job rotation; team handling; and training and supervision required.

Confined Spaces

WHS Regulations Chapter 4 Part 4.3

To help determine if a space is a confined space, the following questions should be considered:

Q1: Is the space not designed or intended primarily to be occupied by a person, and is it at (or designed or intended to be at) atmospheric pressure while any person is in the space? Some spaces that may have atmospheric contaminants are still designed for entry (e.g. spray painting booths)

If **yes**, this may be confined space – go to Q2.

If **no**, it is not a confined space.

Q2: Is the space likely to be a risk to health and safety from:

- An atmosphere that does not have a safe oxygen level; or
- Contaminants that may cause injury from fire or explosion (e.g. airborne gases, dusts or vapours); or
- Harmful concentrations of any airborne contaminants; or
- Engulfment (e.g. grain in a silo).

If **yes** to any of these, it is a confined space.

Entry to a confined space is where a person's head or upper body is in the confined space or within the boundary of a confined space.

The PCBU is required to re-check the status of a space over time as it may become a confined space.

A confined space entry permit:

- Is required to enter a confined space and must be completed by a competent person; and
- entry is not permitted until a permit has been issued.

Signage:

- Suitable signage is required at all stages of work involving confined space entry.

Communication and monitoring:

- Continuous communication with the outside and monitoring of conditions are required.

Specific controls are required relating to:

- Connected plant and services – contaminants may enter or the space may become energised;
- Atmosphere – requires purging, ventilation and safe oxygen levels;
- Atmospheric exposure standards – when exceeded respiratory equipment is required;
- Flammable gases and vapours – concentrations relating to the LEL (lower explosion limit); and
- Fire and explosion – requires identification and exclusion of potential ignition sources.

Emergency Procedures:

The PCBU must:

- establish emergency and rescue procedure and practice those procedures;
- ensure that entry and exits are large enough to allow emergency access and remain unobstructed; and
- plant, equipment and PPE provided for first aid or emergency rescue is maintained.

Record keeping is required by the PCBU of:

- training including emergency training (2 years);
 - risk assessments; and
 - confined space entry permits
- Risk assessments and confined space entry permits must be kept until work is completed; if a notifiable incident occurs during the work they must be held for 2 years.

Fall Hazards

WHS Regulations Chapter 4 Part 4.4

A *fall hazard* includes situations where a worker or other person (e.g. visitor) is:

- in or on an elevated workplace, including plant (e.g. cranes) or a structure (e.g. a building roof, elevated walkway) that is at an elevated level;
- anything used to gain access to these elevated levels of plant or structures e.g. stairs or ladders ;
- near any opening or near the edge where a person could fall (e.g. a stairwell, an excavation, skylight); or
- on or near a surface through which a person could fall (e.g. brittle roof); or
- any other place from which a person could fall, such as a slippery, sloping or unstable surface (e.g. disturbed ground on a construction site).

The PCBU must also provide safe means of access to and exit from the workplace, or any area of the workplace referred to above.

The WHS Regulations establish the first priority as eliminating fall hazards. Carrying out the work on the ground, or work on a solid construction can eliminate working at height. This is usually best achieved at the design stage (advice is provided in the Code of Practice how this can be done).

If it is not possible to eliminate the risk, then risks are to be minimised through use of safe systems of work, including by providing (in descending order) :

- **A fall prevention device** - any equipment designed to prevent a fall and which, after installation, does not require ongoing adjustment, alteration or operation by the worker e.g. secure fence, scaffolding; elevated work platforms; mask climbing work platforms.
- **A work positioning system** - involves the use of any plant or structure (not a temporary work platform) that allows positioning of a person or thing and is safely supported where and while the work is being done e.g. industrial rope access systems, travel restraint systems.
- **A fall arrest system** - designed to prevent or reduce the severity of an injury to a person if a fall does occur e.g. industrial safety nets and safety harnesses and catch platforms.

Additional controls may also need to be implemented, such as training and competency assessment of workers, safe work procedures and work permit systems.

Safe use of ladders:

- Extension or single ladders should only be used as a means of access to and from a work area, not as a working platform.
- Ladders should have a load rating of at least 120 kg and be manufactured for industrial use.
- Single and extension ladders can be prevented from slipping by:
 - placing ladders at a slope of 4:1, and setting up stepladders in the fully opened position; and
 - securing ladders at both the top and bottom.