



15 Minute Safety Presentation

Noise & Hearing Protection

15 MINUTE SAFETY PRESENTATION – NOISE & HEARING PROTECTION

INTRODUCTION

Long-term and frequent exposure to loud noise can permanently damage a person's hearing and could well result in deafness as a worst case scenario.

Acute short term hearing loss can result from exposure to an instantaneous loud noise or a long term effect from exposure can occur from continuous dangerously excessive noise levels.

Damage from excess noise can occur from:

- failing to recognize hazardous noise;
- not using suitable hearing protection;
- wearing hearing protection incorrectly;
- using faulty or damaged hearing protection; or
- failing to wear hearing protection in designated areas.

LEARNING OUTCOMES

At the end of this presentation you will be aware of:

- what the main sources of noise is;
- how to recognize noise exposure;
- how to select suitable protection and when to use it; and
- what faults and damage to look for in hearing protection.

NOISE SOURCES

The first step in preventing hearing loss is to recognise if the noise is excessive.

The main sources of high noise are:

- industrial machinery;
- loud music; and
- power tools.
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A high noise level is legally defined as anything above 85 decibels. A normal office noise level is around 50 decibels, an angle grinder cutting steel would emit around 108 decibels and a gunshot would register approximately 115 decibels of a sudden and loud impact.

The damage from noise exposure is measured using a logarithmic effect i.e. every extra 3db above 85db you can **lose or damage your hearing twice as fast**. Typical noise exposure damage occurs at the following rates:

- 85 decibels – after eight hours exposure.
- 88 decibels – after four hours exposure.
- 91 decibels – after 2 hours exposure.

RECOGNISING NOISE EXPOSURE

You must be able to recognise excessive noise if you are to protect yourself against it. Besides being loud and startling, excessive noise will cause:

- ringing in the ears; and
- pain in your ears.
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A good rule of thumb to remember is that if you are speaking to, or listening to, another person who is less than one metre from you and you can't hear or be heard without using raised voices – the noise is excessive.

The employer has an **obligation** to identify noise hazards in the workplace. The employer should also have placed mandatory signage instructing workers in the use of hearing protection for specific areas or tasks. You must recognise and comply with the signs.