

Hearing the Issues

Tackling the Most Common Workplace Injury



Introduction

There are many dangers workers face on a daily basis in Australia's industrial sector. But you can't always see them coming, with one of the most ignored or downplayed dangers – high noise levels – being the most common injury in the workplace.

Noise is an inescapable part of both the mining and manufacturing industries. Massive machines and heavy equipment constantly moving, shifting, cutting and operating exposes workers to enormous levels of industrial noise.

Although workers can be safely exposed to approximately 85 decibels for a standard working day of eight hours, a simple increase of three decibels halves this exposure time to only four working hours.

This has a dramatic effect on operations and worker productivity, which, in turn, has a huge effect on a company's bottom line, as well as the nation at large, as working hours are slashed, and workers

seek compensation for an easily avoidable issue. Long term exposure to industrial noise, as opposed to sudden sharp noises, accounts for 98% of all industrial deafness compensation claims. According to WorkCover, approximately 16,500 compensation claims are made nationally every year that are based on deafness due to exposure to excessive levels of noise in the workplace, with the average cost of each claim around \$7000¹. This equates to around \$35 million annually in compensation claims².

For individual businesses, the price is also high in indirect costs. Using a conservative approach to measuring indirect costs of the average \$7000 claim is to multiply it by five, equating to \$35,000, plus the original \$7000, costing a company \$42,000. A company operating on a five per cent profit margin would then need to turn over around \$840,000 just to break even³.

But what about the workers themselves?

Counting the Human Costs

Any workplace can seem loud, but how loud do manufacturing and mining work sites get?

To put it into perspective, a front end loader emits 85 decibels, a chainsaw 110 decibels, a rock drill 120 decibels, and a rivet hammer 130 decibels. TIG welding exposes workers to noise levels of up to 75 decibels, whilst common MIG welding puts workers well into the danger zone of 95 to 102 decibels. These tools are all part of workers' daily life and unavoidable if they want to get the job done - even hammering nails into wood creates 98 decibels of noise!

Massive machinery such as steel hammers, rock crushing and screening machinery, metal cutters as well as massive trucks and excavators generate enormous levels of noise. A steel mill, a common industrial workplace, measures in at around 110 decibels, a level which is recognised as the average noise level pain threshold⁴.

According to Flexshield, a company well experienced in dealing with industrial noise issues

and prevention, even in the average metal fabrication workshop, noise levels range between around 80 to 125 decibels, typically caused by angle grinders. This puts workers at a constant risk of what is a common, but completely preventable, workplace ailment, which once acquired is irreversible.

Added to this is new research by the World Health Organisation showing that long term noise exposure above 67 to 70 decibels is linked to cardiovascular health problems and hypertension⁵. It also leads to social isolation, a reduced quality of life, the increased likelihood of absenteeism, presenteeism at work due to the inability to hear, and in turn, decreased production and output, and lowered work performance.

It is clear that there are many dangers and costs associated with high industrial noise levels, but what can a workplace do about it? What approaches can they take to avoid – or at the very least minimise – industrial deafness?



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No Need to be Baffled

Acoustic measures, environmental and noise control, hearing protection, and simple education are the ways you can protect your workers.

Flexshield has developed a number of different approaches to ensure your workers are protected, educated, and have the best chance to avoiding or minimising the invasive effects of heavy industrial noise. The company, which is a leading manufacturer, supplier and installer of noise control and soundproofing products such as acoustic enclosures, attenuators, baffle silencers, modular acoustic panel, and flexible acoustic barriers, is focused on providing a solution to the issue of industrial noise problems.

One of the simple ways Flexshield helps workers to be aware of the dangers and long term repercussions of increased industrial noise has

been through the release of a simple, but widely encompassing ‘industrial noise checklist’.

The Flexshield noise hazard identification checklist gives workers a walkthrough list they can consult to be to avoid and prevent the irreversible effect of industrial noise – industrial noise induced deafness. It also goes a step further by providing free on-site consultation and solutions.

These consultations are designed to pinpoint the sources of industrial noise, and provide workers, and your company, with the knowledge and the equipment to overcome noise problems and protect your workers, so that they no longer need suffer in silence.



- [1] SafeWork South Australia: <http://www.safework.sa.gov.au/contentPages/EducationAndTraining/HazardManagement/Noise/noiseCost.htm>
[2] SafeWork Australia: http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/418/WorkRelated_Noise_Induced_Hearing.pdf
[3] SafeWork South Australia: <http://www.safework.sa.gov.au/contentPages/EducationAndTraining/HazardManagement/Noise/noiseCost.htm>
[4] Industrial Noise Control Scale: <http://www.industrialnoisecontrol.com/comparative-noise-examples.htm>
[5] World Health Organization: <http://www.who.int/docstore/peh/noise/Comnoise3.htm>

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