

HEARING LOSS DUE TO INDUSTRIAL NOISE IS ONE OF THE MOST WIDESPREAD, YET PREVENTABLE WORKPLACE INJURIES

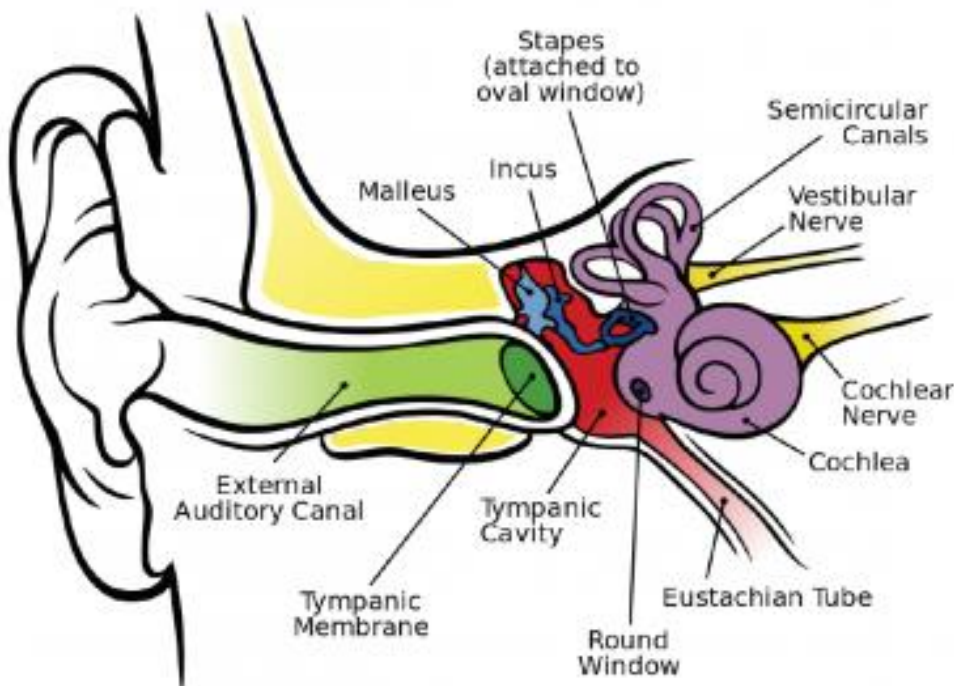
If workplace noise levels are too high, ambient sound will permanently damage hearing.

The risk depends on how loud the noise is and how long a worker is exposed to it.

Damage builds up gradually and changes will not be noticed from one day to the next. But, once it occurs, noise damage is permanent and there is no cure. In 2015 over 4,200 new claims were made with ACC for an ear injury or loss of hearing suffered at work.

If exposure is kept to around 85 decibels (dB) over an eight-hour working day (about the noise level of city traffic from inside a car) most people will suffer no long-term damage. But with more intense noise exposure, damage may occur in a shorter time.

If you are assessing noise levels, remember that the decibel scale is logarithmic, which means every increase of 3 dB *doubles* the sound level, and at that level it will take only *half* as long to damage your hearing.



Hearing depends on the delicate structures inside the ear.

KEEPING NOISE EXPOSURE DOWN TO 85 DB

In simple terms the Health and Safety in Employment Act 1992 makes employers responsible to ensure that the level of noise exposure in the workplace, normalised to an average eight-hour working day, must not exceed 85 decibels (about the noise level of city traffic from inside a car) and the very loudest noise must not exceed 140dB, even if it is only for a short time.

Where noise levels exceed the Workplace Exposure Standard of 85 dB over an 8-hour day, you must deal with the hazard by:

- Controlling the noise at source; or
- Isolating or insulating the processes that cause excessive noise.

Until these control measures are in place, or where they are not practicable, you must provide hearing protection for employees. An employer is also required to monitor employees' exposure to noise and, with their consent, monitor their hearing.

WHAT DOES THE SLC80 FIGURE MEAN?

All ESKO hearing protection gear meets the standards of AS/NZS 1270:2002 Acoustics—Hearing Protectors. Products certified under the standard are given an SLC₈₀ rating number. This number represents the decibel reduction that can be expected from that particular safety product. For instance, ESKO's MAX33 earmuff achieves an SLC₈₀ rating of 33dB, meaning that the MAX33 will attenuate sound levels by 33dB.

So, a worker who is exposed to a constant 115dB (about the noise level of loud small engine equipment, sandblasting or rock drilling), but wears a MAX33 earmuff will reduce his exposure to a safe 82dB.

For convenience, under AS/NZS 1270:2002, hearing protectors are listed according to their hearing protection class, with 5 the highest level of protection:

CLASS	SPECIFIED SLC ₈₀ dB
1	10 to 13
2	14 to 17
3	18 to 21
4	22 to 25
5	26 or greater

THE FOUR MAIN KINDS OF HEARING PROTECTION:



DISPOSABLE EARPLUGS:

These are usually made of soft expandable PU foam. The wearer rolls the plug between fingers to compress it before inserting it into the ear canal, where the plug expands again to seal against the individual contours of the wearer's ear.

These are economical, designed for single use and are available in uncorded and corded options. There is also a metal detectable version with a metal tab in each plug and a metalized cord that can be easily detected if they accidentally fall into processing lines.



REUSABLE EARPLUGS:

These are moulded from washable soft plastic or silicone rubber and are usually 'flanged', with flexible ridges or flaps that circle the plug and enable it to seal gently against the ear canal. Corded and uncorded options are supplied in a handy resealable plastic case and can be reused.



BANDED EARPLUGS:

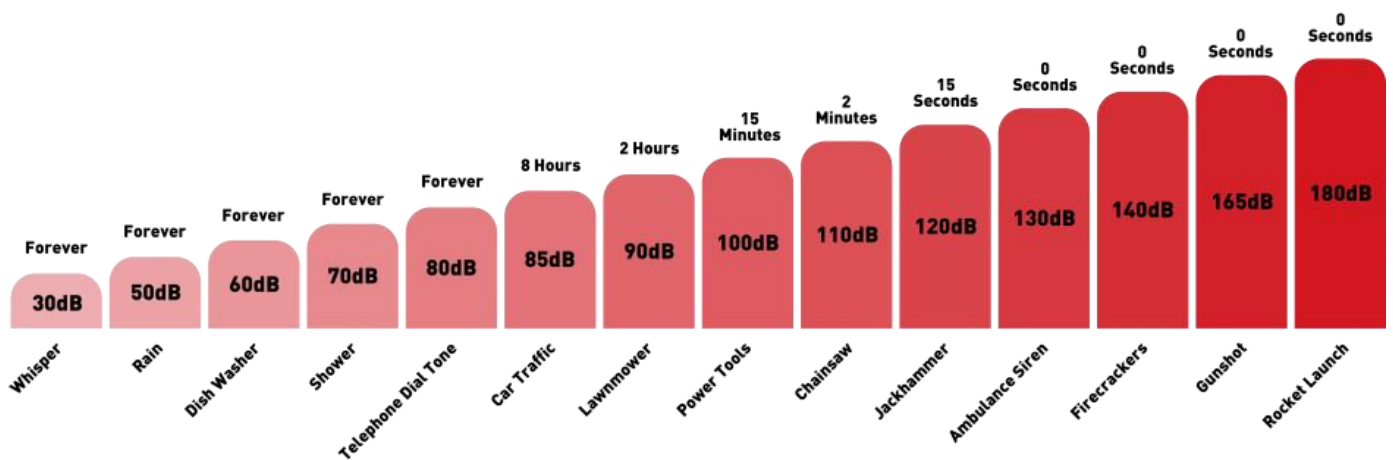
A convenient, easily inserted option for those who are constantly in and out of noisy areas.



EARMUFFS:

Suppress unwanted noise by completely covering the outer ear with a plastic shell filled with sound-deadening material to prevent noise reaching the inner ear. Our styles come with a variety of features from adjustable headband to hard hat attachments to suit individual needs.

SOUND LEVELS FROM 30 TO 180 DECIBELS--- HOW LONG IS IT SAFE?



PRODUCT SELECTION GUIDE FROM THE ESKO RANGE:

PRODUCT CODE	DESCRIPTION	CLASS	EARMUFF STYLE	EARPLUG STYLE	WITH HEADBAND	CORDED	METAL DETECTABLE
E-MAX33	Esko Max33 Folding Earmuff, 33dB, Class 5,	5	Yes		Yes		
E-MAX33 707	Esko Max33 707 Banded Earmuff, 33dB, Class 5,	5	Yes		Yes		

X300	Esko X300 Banded Earmuff, 26dB, Class 5	5	Yes		Yes		
RE50-BU	Vortex Earplugs Blue Uncorded Reusable, Class 4, Box 50 pairs	4		Reusable			
RE50-BC	Vortex Earplugs Blue Corded Reusable, Class 4, Box 50 Pairs	4		Reusable		Yes	
RE2-BC	Vortex Earplugs Blue Corded, Class 4, Blister carded 2 Pack	4		Reusable		Yes	
DE200-OU	Box 200 pairs bullet-shaped earplugs, foam uncorded, Class 5, 26dB,	5		Disposable, Bullet			
DE100-OC	Box 100 pairs bullet-shaped earplugs foam corded, Class 5, 26dB	5		Disposable, Bullet		Yes	
DE6-OU	Vortex Earplugs Orange Uncorded, Class 5, Blister carded 6 pack	5		Disposable, Bullet			
DE500-OR	Vortex Orange Bullet Shaped Earplugs, Class 5, refill bag for dispenser, 500prs	5		Disposable, Bullet			
DE100-MD	Vortex Metal Detectable corded earplugs, Class 5, 26dB, for food industry compliance	5		Disposable, Bullet		Yes	Yes
DE500-DPR	Vortex Earplug Dispenser Station holds 500 Vortex Disposable Uncorded Earplugs, Jam-free Dispenser design						

Relevant Australian/New Zealand standards:

- AS/NZS 1269.1:2005 Occupational noise management - Measurement and assessment of noise emission and exposure
- AS/NZS 1269.2:2005 Occupational noise management - Noise control management
- AS/NZS 1269.3:2005 Occupational noise management - Hearing protector program
- AS/NZS 1269.4:2014 Occupational noise management - Auditory assessment