

WORKPLACE NOISE – HOW LOUD IS TOO LOUD?

SAFE EXPOSURE TIME WITHOUT HEARING PROTECTION
Based on Australian WHS Regulation and AS/NZS 1269.1:2005

Noise Level Examples – Doubling Rule Table

Every 3 dB increase doubles the sound energy and halves the safe exposure time.

85 dB	Busy city traffic, lawn mower	8 hours
88 dB	Hand-held drill (low), domestic vacuum	4 hours
91 dB	Forklift idling, belt sander	2 hours
94 dB	Circular saw, angle grinder	1 hour
97 dB	Hammer drill, electric leaf blower	30 minutes
100 dB	Jackhammer, small bulldozer	15 minutes
103 dB	Chainsaw, compressed air blowgun	7.5 minutes
106 dB	Large industrial fan, air compressor	3.75 minutes
109 dB	Rock concert (front row), pile driver	~1.9 minutes
112 dB	Emergency siren (close), pneumatic rivet gun	~57 seconds
115 dB	Jet ski at full throttle, metal stamping press	~28.5 seconds
118 dB	Car horn at 1 metre, concrete cutting saw	~14.3 seconds
121 dB	Oxygen acetylene torch, fire alarm bell (close)	~7.1 seconds
124 dB	Jet engine start (close range), power hammering	~3.6 seconds
127 dB	Firecracker, sledgehammer on steel	~1.8 seconds
130 dB	Military jet takeoff (deck crew), nail gun	~0.9 seconds
133 dB	.22 calibre gunshot, oxygen tank rupture	Instant damage risk
136 dB	Industrial explosion, close thunderclap	Instant damage risk
140+ dB	Shotgun blast, flashbang grenade	No safe exposure time

Recommended Class Of Hearing Protection

Less than 90 dB(A)	Class 1
90 to less than 95 dB(A)	Class 2
95 to less than 100 dB(A)	Class 3
100 to less than 105 dB(A)	Class 4
105 to less than 110 dB(A)	Class 5
Greater than 110 dB(A)	Custom protection required

Audiometric testing: Within 3 months of starting high-noise work, then every 2 years

Noise assessments: At least every 5 years, or sooner if work conditions change.

Work Health and Safety Regulation 2017

A PCBU must ensure workers are not exposed to noise levels that exceed the standard. If noise levels are higher than 85 dB(A), exposure time must be reduced or hearing protection must be used. Exposure above this average level increases the risk of permanent hearing loss over time.

If a worker regularly uses hearing protection to control risk above the standard, employers must provide:

- A baseline hearing test within 3 months of starting exposure
- Follow-up testing every 2 years



Think Your Site Might Be Too Loud?

Hayden Health & Safety conducts on-site occupational noise assessments and audiometric testing, helping your business stay compliant and protect your workers.

