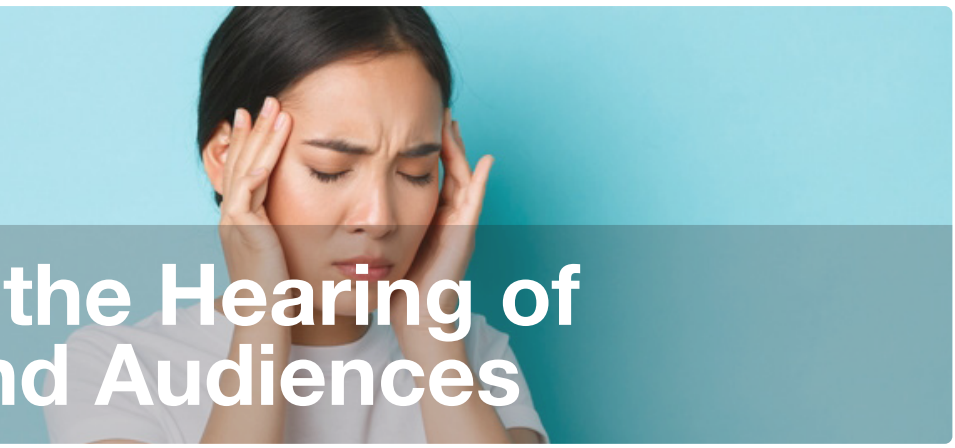

Protecting the Hearing of Workers and Audiences

Clocking the Noise Risk

Workplaces, including churches, have a duty of care to manage the sound levels that workers, volunteers and audiences are exposed to.

The information below is a summary only. Anyone responsible for health and safety should read and understand the *Work Health and Safety (WHS) Code of Practice* on noise management and hearing loss prevention relevant to their state or territory.

Hearing damage is most often caused by repeated exposure to loud sounds over time. However, a single loud sound above 120 decibels - especially at close range - can cause immediate and permanent damage.

On the decibel scale, every 3dB increase doubles the sound energy. This means that the safe exposure time is halved with every 3dB rise. For example, while 85dB is considered safe for up to 8 hours, increasing the volume to 88dB reduces the safe exposure time to just 4 hours.

The table below outlines how long a person can be safely exposed to different noise levels before their hearing is at risk:

	DECIBELS (dB)								
	85	88	91	94	97	100	115	124	>130
Exposure time	8 HRS	4 HRS	2 HRS	1 HR	30 MIN	15 MIN	28 SEC	3.6 SEC	0.9 SEC
Type of sound	HAIR DRYER, FOOD BLENDER, HAMMER		LAWNMOWER, HAND DRILL, MOTORCYCLE, JACKHAMMER AT 10MTR				ROCK CONCERT, SIREN, CHAINSAW		GUN SHOT

A NOTE ON LIVE PERFORMANCES (Eg. Song services, big camps, school concerts).

Workplace “white” noise is somewhat different to performance sound. When it comes to congregational/ audience enjoyment and comfort factor our caveat on decibel levels is simply, “just because you can, doesn’t mean you should.”

Just because the safety standard says 90dB over 2 hours is acceptable does not mean it is enjoyable or comfortable. Enjoyable sound at live performances is a technical and complex balance. If you’re unsure of the sound levels at your performance seek out the advice of an experienced sound engineer, and watch the congregational body language - if they’re not singing along, or they leave, there’s a chance that they may not be enjoying the volume.

Sound advice.

Within the work environment anything exceeding 85 decibels requires control measures be implemented to reduce the exposure as much as practicable, such as personal protective hearing devices, reduced exposure time, etc.

RAISED VOICES

Do you and those around you have to use a raised voice to communicate with someone only one metre away?

AUDITORY FATIGUE

Is your hearing slightly worse at the end of the day? When you leave the workplace, or a performance, does your hearing feel “fuzzy” or muffled?

LOUD EQUIPMENT

Do your workers use powered tools, machinery or audio and sound equipment?

PAIN OR HEARING LOSS

Are you or any of your workers hard of hearing, experiencing ear pain or temporary hearing loss?

RISK MANAGEMENT SERVICE
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