



# PROTECTING THE HEARING OF WORKERS, VOLUNTEERS AND AUDIENCES

## Be safe with sound.

A duty of care exists to manage the sound levels that we expose our workers and volunteers to, as well as our audiences.

This information provides a summary of key details only and we recommend that officers and persons responsible for safety read and understand the WHS Code of Practice relating to noise management and hearing loss prevention for your state or territory.

Hearing damage usually results from exposure to loud sounds over a period of time but a single loud sound over 120dB, especially if it is within close proximity, can cause immediate hearing damage.

On the decibel scale, an increase of 3dB equates to twice as much sound energy. This means that the length of time a worker should be exposed to the noise is reduced by half for every 3dB increase. So while 85dB over 8 hours is the accepted standard an increase of only 3 decibels, to 88dB, means a limit of 4 hours to ensure the standard is not exceeded. The table below shows the length of time a person may be exposed to a certain level of noise before the safety of their hearing is compromised.

	DECIBELS (dB)								
	85	88	91	94	97	100	115	124	>130
Exposure time	8 HRS	4 HRS	2 HRS	1 HR	30MIN	15 MIN	28 SEC	3.6 SEC	0.9 SEC
Type of sound	HAIR DRYER, FOOD BLENDER, HAMMER		LAWN MOWER, 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 experienced sound technicians, 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 sound level.

## 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.

**Warning signs that indicate noise levels may exceed safe decibels:**



### RAISED VOICE

Do you have to raise your 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?

## READY TO HELP

Risk Management Service is a dedicated service department of the Seventh-day Adventist Church in the South Pacific.

[rms.org.au](http://rms.org.au)

