



**AUSTRALASIAN
SAFETY
SERVICES**

**Audiometric (Hearing) Screening
September - November 2013**

**Sample Report
QLD**

Prepared by:

Name of Technician
Qualified Audiometric Technicians

INTRODUCTION

Australasian Safety Services provided on-site audiometric screenings to Sample Company QLD on September 23rd, October 29th- 31st, and November 1st, 4th- 8th 2013. Testing was conducted by Qualified Audiometric Technicians Carl Cocila and Jeff Emerson. The tests were conducted in accordance with *AS/NZS 1269.4:2005 Occupational Noise Management*, in a sound-treated acoustic booth manufactured to Australian Standards in our specially designed mobile clinic.

Over the 10 days of testing, 356 employees had their hearing thresholds assessed. During the testing processes, if results indicated a hearing loss, the employee had his or her ears examined via otoscope. All employees had their results briefly shown and explained to them at the time of testing.

The overall hearing status of company employees is presented in this report prepared by Carl Cocila and Jeff Emerson. Individual audiological reports in PDF format were prepared for each employee and are provided separately for issue to the employees at your discretion.

It is recommended that copies of the individual reports be provided to each employee for their personal reference. Employees should be encouraged to follow the recommendations (if any) to minimise the risk of further hearing loss.

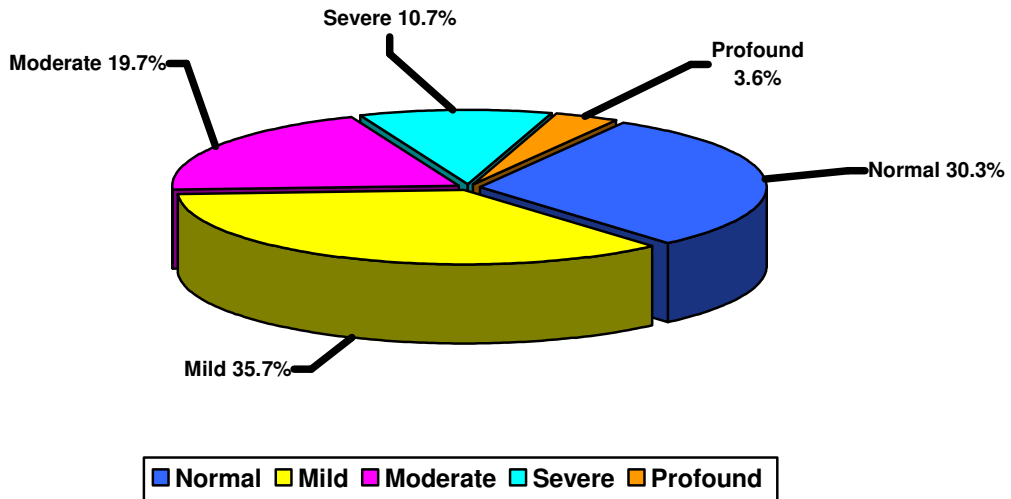
The equipment used to provide the results in this report was an Amplivox Model PC 850 - Serial Number # 30190. Calibration is current and next due July 2014. An Amplivox Model PC 850 - Serial Number # 30533. Calibration is current and next due September 2014. And an Amplivox Model PC 260 – Serial Number # 12789 calibration is current and next due April 2014.

RESULTS

A total of 356 employees had their hearing assessed during the course of this audiometric assessment. The group data obtained from testing has been categorized and graphed to display the degree of hearing loss amongst the workers.

Tables 1- 5 on the following pages list the names of the employees who were recorded with some hearing loss, broken into each of the accepted levels of hearing loss.

Graph 1 – Degree of Hearing Loss – 356 Employees



LEVELS OF HEARING LOSS

The following gives further information on the different levels of hearing loss. There are many different reasons why a person will have hearing loss. This includes (but is not limited to): age, noise exposure, ototoxic chemicals, medical conditions or a mixture of these. Audiometric (hearing) screening alerts the individual and the employers to potential problems that may be treatable or need further investigation.

Profound hearing loss

Profound hearing loss is the most extreme hearing loss. A profound hearing loss means that a person may not hear loud speech or any speech at all. The person is forced to rely on visual cues instead of hearing as the main method of communication. This may include sign-language and/or lip reading.

Severe hearing loss

People with **severe hearing loss** have difficulty hearing in all situations. Speech may be heard only if the speaker is talking loudly or at close range. A severe hearing loss may sometimes cause the person to miss up to 100% of the speech signal. Symptoms of severe hearing loss include inability to have conversations except under the most ideal circumstances like face-to-face, without background noise and/or accompanied with lip reading.

Moderate hearing loss

A **moderate hearing loss** may cause the person to miss 50-75% of the speech signal. This means the person would not have problems hearing at short distances and understanding people face-to-face, but would have problems if distance or visual cues changed. Symptoms of moderate hearing loss include problems hearing normal conversations with or without background noise and problems hearing consonants in words.

Mild hearing loss

A **mild hearing loss** may cause the person to miss 25-40% of the speech signal. Usually this results in problems with clarity since the brain is receiving some sounds but not all of the information. Symptoms of mild hearing loss include problems understanding someone further away than a normal distance for conversation, or even up close if the background environment is noisy. Weak voices are also difficult to understand for people with mild hearing losses.

Unilateral hearing loss

A **unilateral hearing loss** is hearing loss in one ear. Hearing in one ear is normal but the other ear is hearing-impaired. Symptoms of unilateral hearing loss usually include difficulty locating the source of sounds and problems hearing or understanding speech in certain situations, such as in the presence of background noise or if the person speaking is standing on the side of the weaker ear.

REPORTING

Australasian Safety Services would be happy to discuss in detail any information and actions to reduce or eliminate the risk of Noise Induced Hearing Loss at your site. Further information is also available in the *AS/NZS 1269.4:2005 Occupational Noise Management* and the *National Code of Practice for Noise Management and Protection of Hearing at Work [NOHSC: 2009(2004)]*.

The individual reports include an interpretation of results and recommendations for further action (if required). It is imperative that employees are encouraged to undertake any suggested actions in order to minimise the risk of any further hearing loss issues for the specific employee.

Further action *may* take the form of one or more of the following categories. All employees who have a **Mild, Moderate, Severe or Profound Hearing Loss** classification should have as a **minimum**:

- Review of current hearing protection – appropriate to workplace.
- Coaching or education program on preventing hearing loss.

Those who have been classified as having **Moderate, Severe or Profound hearing loss** should be encouraged to seek further review through either:

- Consultation with their GP for wax removal and/or medical assessment;
- GP referral to Ear, Nose & Throat (ENT) specialist for further investigation;
- Full audiometric assessment by an audiologist to determine nature and extent of hearing loss; or
- Full assessment by an audiologist to determine rehabilitation options (if possible).

Note: Some employees may require more than one course of action and some employees may require a re-test as soon as practical. This would provide the ability to assess permanent versus temporary hearing loss.

Hearing screening tests are a key measurement of the success of any hearing conservation program.

“Monitoring audiometry should be carried out within 12 months of initial work exposure for comparison with the results of reference (baseline) audiometry. In the absence of significant threshold shift or change in the work situation, it may then be sufficient to repeat the test at yearly intervals. Note: At high L_{Aeq} , 8h (daily noise exposure levels) equal or greater than 100dB (A) more frequent audiometric testing may be desirable.

*An audiometric testing program should be available to any employee likely to be routinely exposed to excessive noise even if they regularly use personal hearing protectors. Changes in hearing levels over time should be thoroughly investigated.”*¹

¹ Australian Standard 1269.4-2005

Audiometric Testing Results – Sample Company QLD September – November 2013

Table – 2 Employees with Mild Hearing (continued)

SURNAME	FORENAME	LEFT EAR	RIGHT EAR
		Mild	Normal
		Mild	Mild
		Mild	Mild
		Mild	Mild
		Mild	Mild
		Normal	Mild
		Mild	Normal
		Mild	Mild
		Normal	Mild
		Mild	Normal
		Normal	Mild
		Mild	Mild
		Mild	Mild
		Normal	Mild

Table – 3 Employees with Moderate Hearing Loss

SURNAME	FORENAME	LEFT EAR	RIGHT EAR
		Moderate	Moderate
		Moderate	Moderate
		Moderate	Moderate
		Moderate	Normal
		Mild	Moderate
		Moderate	Moderate
		Moderate	Moderate
		Moderate	Mild
		Normal	Moderate
		Moderate	Mild
		Mild	Moderate
		Moderate	Moderate
		Moderate	Moderate
		Moderate	Mild
		Moderate	Moderate
		Mild	Moderate
		Moderate	Moderate
		Moderate	Moderate
		Mild	Moderate
		Moderate	Mild
		Moderate	Mild
		Moderate	Moderate
		Moderate	Moderate
		Mild	Moderate
		Moderate	Mild
		Moderate	Mild
		Moderate	Moderate
		Moderate	Moderate
		Moderate	Mild

Audiometric Testing Results – Sample Company QLD September – November 2013

Table – 4 Employees with Severe Hearing Loss

SURNAME	FORENAME	LEFT EAR	RIGHT EAR
		Severe	Mild
		Mild	Severe
		Severe	Mild
		Severe	Moderate
		Severe	Mild
		Moderate	Severe
		Severe	Moderate
		Severe	Severe
		Moderate	Severe
		Mild	Severe
		Severe	Severe
		Severe	Moderate
		Severe	Moderate
		Severe	Severe
		Severe	Moderate
		Severe	Moderate
		Mild	Severe
		Moderate	Severe
		Mild	Severe
		Severe	Severe
		Moderate	Severe
		Severe	Severe
		Moderate	Severe
		Severe	Severe
		Moderate	Severe
		Severe	Severe
		Severe	Severe
		Moderate	Severe
		Severe	Moderate
		Severe	Severe
		Severe	Moderate
		Severe	Severe
		Severe	Severe
		Severe	Moderate
		Severe	Severe
		Severe	Mild
		Severe	Moderate
		Severe	Severe
		Severe	Moderate

Audiometric Testing Results – Sample Company QLD September – November 2013

Table – 5 Employees with Profound Hearing Loss

SURNAME	FORENAME	LEFT EAR	RIGHT EAR
		Severe	Profound
		Profound	Severe
		Severe	Profound
		Profound	Moderate
		Moderate	Profound
		Severe	Profound
		Severe	Profound
		Moderate	Profound
		Profound	Profound
		Severe	Profound
		Severe	Profound
		Profound	Profound
		Profound	Severe

Audiometric Testing Results – Sample Company QLD September – November 2013

During the screening process, a series of questions were asked which are designed to provide clues to possible causes of hearing loss or to determine existing loss or conditions that may affect the results of the test.

These questions are:

1. Do you often work in a noisy area at work?
2. Do you know the noise levels?
3. Do you currently wear hearing protection?
4. What type are you currently wearing?
5. Do you have any problems with your ears? (ringing or buzzing)
6. Do you have any health problems today? (Flu, headache, ear ache)
7. Have you been exposed to any loud noises in the last 16 hrs?

It is significant to note that for Question 2, most employees generally do not know the level of noise they are exposed to. You can conclude therefore that they are unaware of the actual risk if they are unaware of the actual danger. This highlights the impact of even basic knowledge through training or coaching tailored to your site.

CONCLUSION

A percentage (69.7%) of employees have presented with hearing loss. Consideration should be given to the levels of hearing loss tables contained here to identify key areas or personnel involved.

Hearing Loss may continue and indeed worsen if nothing changes. As there is no cure for Noise Induced Hearing Loss (NIHL), it is imperative that the reason for the employees hearing loss be identified and steps taken to mitigate the risk of further loss.

Employees with any level of hearing loss should be considered as "at Risk". This risk is escalated by one or more of the following;

- ☒ Working at all within high noise areas.
- ☒ Working for extended periods of time in areas above 85dBA.
- ☒ Poor compliance in wearing their Hearing Protection correctly.
- ☒ Poor compliance in wearing their Hearing Protection when needed.

The last line of defense against noise induced hearing loss is the employees hearing protection. The correct fit and use of which is vital to preventing hearing loss.

A precautionary measure available for all employees is for them to undertake **training in the correct use of appropriate hearing protection**. Such formal training should be mandatory for all staff during orientation/induction and at regular intervals to refresh the information and stress the importance.

In recent years, advanced hearing protectors have become available in Australia & New Zealand. These custom made protectors do cost more initially but are reusable and over time are very cost effective. Consideration should be given to this type of product in particular for employees identified as "High Risk".

Without prior hearing test results, it is not possible to conclude any hearing loss result as Permanent or Temporary. It is important to file the results for future reference. Australasian Safety Services Pty Ltd provides the results on USB. If we have the opportunity to conduct your next hearing test, when due, we can provide a comparison of the results thereby further enhancing the Hearing Conservation Program at your site.

Please contact Australasian Safety Services Pty Ltd if you would like us to discuss a hearing loss conservation program for your site.

Regards

Technicians Name