

Can you hear?

Newsletter issue 4 Spring 2012

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#### 1. Factors related to communication breakdown:

The most common types of hearing loss affect the inner ear, resulting in distortion as well as inability to hear soft sounds. Therefore, even with perfectly fitted hearing aids or implants imperfect sound information reaches the brain. When faced with difficulty to hear clearly, it helps to identify the most likely reasons for the problem and address them as much as possible. It may help to think of 3 broad areas of potential difficulty: environmental factors, speaker factors and listener factors. **Environmental** – poor lighting does not allow full use of visual cues obtained though lipreading, several people speaking at once, and distracting noise from the TV or other appliances

**Speaker** – speaking too rapidly, standing too far away or not getting the listener's attention before speaking

**Listener** - inefficient use of hearing aids, inattention, fatigue, failure to inform the speaker that the message has not been received.

In any listening situation, it's possible to identify some of the listed factors and of course, there are



many more possibilities. Addressing each one will optimise the listening situation and is more likely to prevent communication breakdowns and associated frustration.

Medical Audiology Services is organising group sessions with our patients, their friends and family. If you would like to attend a program of two 2-hourly sessions targeting communication difficulties in a practical, small group informal approach, please contact us on **9321 7746**.

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2. Cochlear Implant support group meeting:

Date: 10th of October 2012 Time: 3:00PM Local: Medical Audiology Services at 49 Colin St West Perth

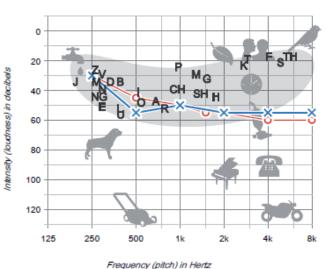
This meeting is a great opportunity to meet people who are cochlear implant users. You can share experiences, common concerns, coping skills, etc.

If you are a cochlear implant candidate and would like to seek a more personal opinion regarding the benefits and limitations of a cochlear implant, this meeting is also an excellent environment to clarify your doubts. Contact us on **9321 7746** if you would like to attend.

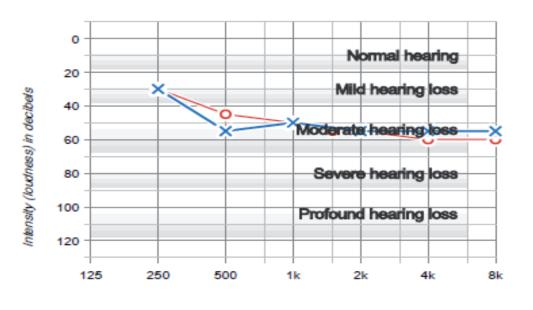
#### 3. Understanding your hearing test:

If you have had a hearing test, your audiologist used an audiogram to show you the results. Here is an explanation of how to interpret those results, and how they relate to everyday sounds.

An audiogram is a chart audiologists use to plot the softest sounds a person can hear, separately for the left ear (blue crosses) and right ear (red circles). Across the chart from left to right are frequencies (or pitches) most important for understanding speech, commonly measured between 250Hz and 8000Hz. The example here shows that /e/ and /z/ are low pitch sounds, while /t/ and /s/ are high pitched. Intensity (or volume) of sounds increases from very soft sounds at the top (e.g. leaves rusting) to very loud at the bottom (e.g. motorbikes). There are other examples of common sounds plotted



The graph bellow shows the classification of hearing loss severity, from normal hearing to profound hearing loss. A person with normal hearing in both ears would have both lines towards the top of the graph above 20 decibels. The lower on the graph the results occur, the more severe the hearing loss, and most of us have at least slightly different hearing levels for different pitches. The example below shows a very common audiogram shape, with mild hearing loss for low pitch sounds and moderate hearing loss for medium and high pitch sounds. A person with this audiogram is likely to experience problems hearing clearly, unless in optimal listening conditions (quiet room, facing the speaker). Usually, speech sounds are muffled. The most difficulty is experienced in noisy places.



Frequency (pitch) in Hertz

## 4. Unilateral Hearing Loss: the effects of hearing in one ear only

Before the 1980s, people with unilateral hearing loss were not offered many options for rehabilitation. However, this has changed with several studies showing that hearing loss in one ear is enough to delay speech development in children, and interfere with learning skills and academic performance.

In adults, multiple studies have demonstrated that no hearing from one ear causes difficultly understanding when there is background noise, in group situations, and when the speaker is talking from the poorer hearing side.

Secondary to these hearing issues, it is common to identify emotional, psychological and social difficulties. This includes frustration, isolation, low selfconfidence and low self-esteem.

Find out more in the next issue.

## Services provided by Medical Audiology: Adult and paediatric hearing assessments; cochlear implant and Baha; Balance assessment; hearing aids, tinnitus management; protective earplugs; pre/post employment; assistive listening devices.

# MAS aims to distribute an informative newsletter tri-annually. If you would like to receive information on a specific topic, email or call us.

If you know anyone who might enjoy our newsletter or if you would like to be removed from our mailing list, please let us know. **Phone 9321 7746 or email reception@medicalaudiology.com.au**