# **Other Hearing Conditions**

A number of other conditions are related to hearing disabilities, although not all of them involve hearing loss. Three of the most common are Tinnitus, Meniere's Disease and Hyperacusis.

## AT A GLANCE

- Tinnitus Sounds or noises like ringing, whining, buzzing or grinding affecting one or both ears.
- Meniere's Disease Affects the inner ear and sufferers usually experience hearing loss, vertigo and tinnitus.
- Hyperacusis Oversensitivity to loud sounds and noises.

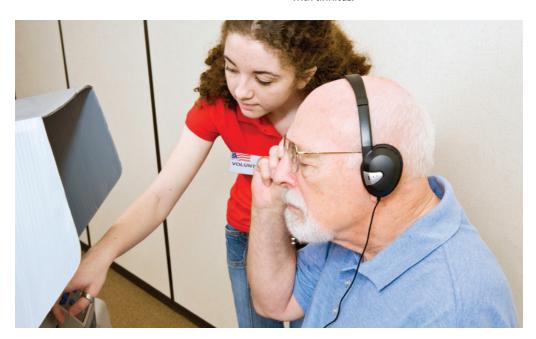
# TINNITUS

## What is it?

Sounds or noises like ringing, whining, buzzing or grinding, chainsaws, cicadas or crickets. It is common, and can be intermittent. Tinnitus affects around one in six New Zealanders, rising to one in three over the age of 65

# **Types of tinnitus**

Subjective tinnitus - Only heard by the person with tinnitus.



 Objective or Pulsating tinnitus - Heard by the person with it and someone else such as a doctor or hearing care professional. The regular pulsing of sounds can correspond with the pulsing of blood in a vessel near the ear.

#### Causes

Scientists believe tinnitus is caused by an interruption somewhere in the complex hearing process. The brain compensates for the reduced input by searching for noises including those generated inside the body or the brain itself. This is what we experience as tinnitus.



Causes can include:

- · Wax in the ear
- · Inherited abnormality of the ear
- Some medications e.g. anti-inflammatories (including aspirin), antibiotics, sedatives or antidepressants, oral contraceptives
- Otosclerosis, acoustic neuroma, untreated infection or other diseases of the ear
- Diabetes, arthritis, high blood pressure, and allergies
- Whiplash, neck injury, or problems with the jaw
- Diving and flying
- Certain foods, particularly dairy foods, caffeine, wheat, and salt
- Certain recreational drugs, e.g. nicotine, alcohol, marijuana, ecstasy, etc
- Meniere's disease
- · Stress or hormonal problems.

Tinnitus can not be cured, but can be managed, reduced or alleviated. Avoid exposure to loud noise and see your doctor, an audiologist, your local Hearing Association or a hearing therapist.

For more information including contact details refer to www.tinnitus.org.nz

# **MENIERE'S DISEASE**

# What it is

Meniere's Disease affects the balance organ of the inner ear. Sufferers usually experience episodes of hearing loss, vertigo and tinnitus, and a feeling of fullness in the ear. The tinnitus and hearing loss can eventually become permanent.

It affects about one in every 2000 people regardless of their age.

Most people experience:

 Hearing loss - Usually in one ear, that comes and goes. Over time, hearing loss gets worse but sufferers can also be over-sensitive to loud sounds and noise (hyperacusis).

- Tinnitus See the section on tinnitus (above).
- Pressure in the ear A feeling that the ear is blocked. The feeling can come and go and vary in intensity. It is similar to the blocked-ear feeling when in an aircraft.
- A sense that the world is spinning or rotational vertigo – This comes and goes and people usually experience nausea and vomiting. It can last minutes or hours. Some people are affected so acutely they drop to the ground. Afterwards people may sleep for long periods.

# Some people may experience:

 Involuntary eye movements – This is because the inner ear mistakenly sends a signal to the brain that the body is turning. It can make it hard to see clearly.

# Some people will not experience:

 Rotational vertigo – This is sometimes called cochlear Meniere's Disease.  Hearing loss – This is sometimes called vestibular Meniere's Disease.

Meniere's Disease is usually diagnosed after all other possible causes of symptoms are ruled out.

#### What it is not

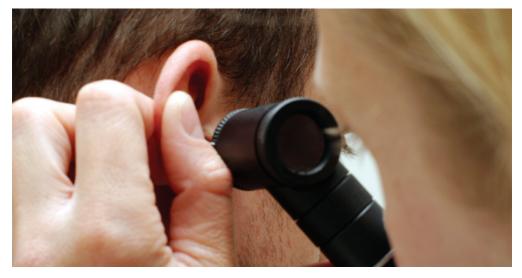
#### It is not:

- Hereditary
- Infectious
- Able to be cured

# What to expect if you have Meniere's Disease

# After a number of years:

- Symptoms may start to be experienced in the other ear. The symptoms and experience in the second ear are not usually as severe.
- Dizziness disappears as the balance and auditory nerve functions degenerate.
- Symptoms may disappear suddenly and return five or 10 years later.
- Hearing loss may increase but other symptoms become less frequent and severe.



## **Treatment**

Meniere's Disease can be managed, but not cured. To relieve the symptoms:

- Reduce the pressure on the inner ear.
  A doctor may prescribe something.
- · Reducing salt intake may also help.
- Have a hearing aid fitted. Talk to a hearing care professional about the best hearing aid solution to match the symptoms.
- In some cases ear surgery is possible.

Remember that with any condition that affects your senses and orientation it's important to be aware how stressful this may be and the potential for anxiety or depression.

### **Technical**

Meniere's Disease is a progressive disease of the balance organ in the inner ear. The cause is unknown but it is believed that a potassiumrich fluid in the inner ear called endolymph leaks into the perilymph and/or into the system of membranes called the labyrinth. Perilymph is another fluid in the inner ear which is sodium rich. This interferes with the tiny hair cells that feed into the nerve endings that control balance.

## **HYPERACUSIS**

# What is it?

Hyperacusis is oversensitivity to loud sounds and noises. Sometimes even quiet sounds seem excessively loud. It becomes hard to understand many words because stressed and unstressed syllables are hard to distinguish. It can be a symptom of Meniere's disease.

## Causes

The hearing system fails to code sounds appropriately, meaning that our normal understanding of what is very loud and what is quiet collapses. No one is sure yet whether this change occurs at the level of the ear or the hearing pathways in the brain.

#### **Treatment**

Many modern hearing aids have a built-in attenuator that regulates the maximum output from the aids, damping loud noises and thus protecting the vulnerable ear.

#### **Technical**

When people have a hearing loss they may experience an abnormal amplification of sound called recruitment of loudness. This is different from Hyperacusis which can occur with normal hearing. Difficulty in understanding words is called reduced discrimination ability. What ever the cause of decreased sound tolerance, it can have a strong impact on a person's life, causing them to withdraw and isolate themselves.



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Want to know more detail? Go to www.hearing.org.nz

Based on information from Hear This – All You Need To Know about Hearing Loss published by Tauranga Hearing Association phone/fax (07) 578 6476 or email tauranga@hearing.org.nz

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