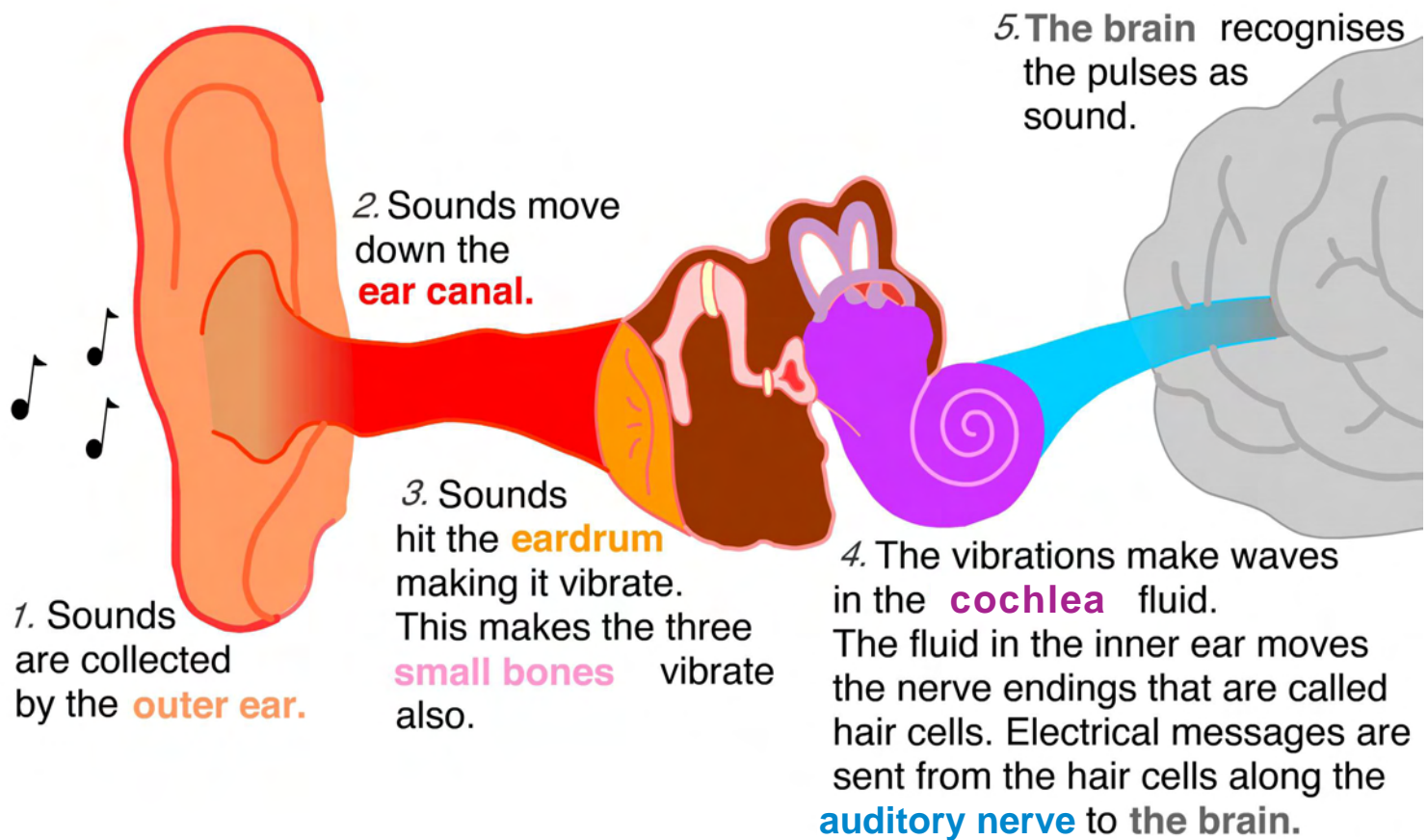


# Hearing Loss

## How the Ear Works



The ear is divided into three main parts: the **outer ear**, the **middle ear** and the **inner ear**.

## Types/Causes Of Hearing Loss

We have two ears so that the brain can tell (locate) where the sound is coming from. When only one ear is working properly it is difficult to locate (find) where the sound is coming from.

The type of hearing loss someone has depends upon where in the ear the problem is. The common types of hearing loss are:

### **Conductive**

Hearing loss is caused by a problem in the **outer** or **middle ear**. A conductive loss prevents sound from reaching the nerves in the **inner ear**.

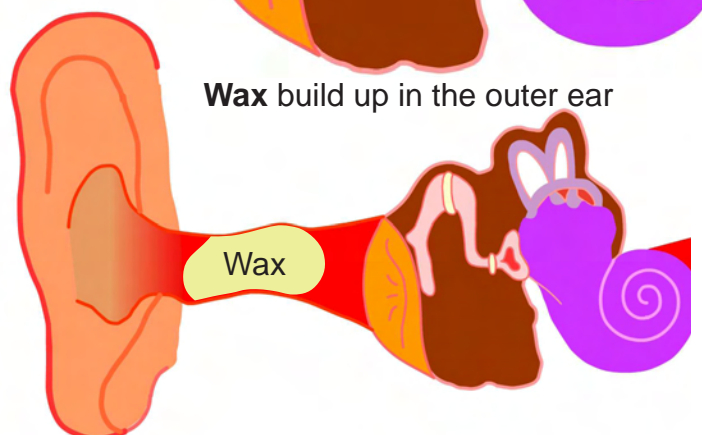
**Common causes include:**

**Deformity** in the outer or middle ear structure

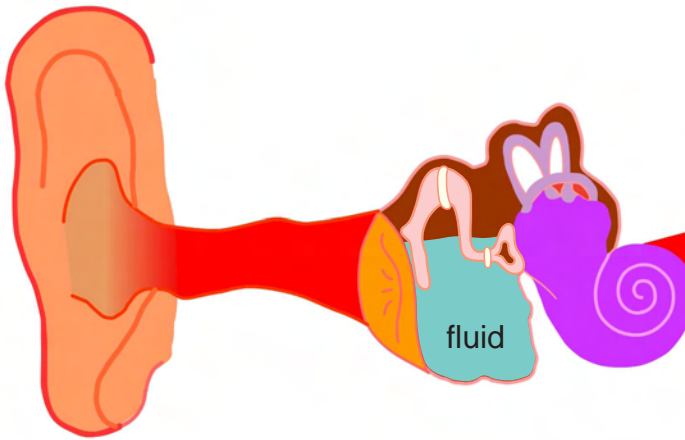
**Perforation** (hole) in the eardrum



**Wax build up** in the outer ear



**Fluid** build up in the middle ear



**Otosclerosis**-when the little bones in the middle ear don't move well.



### **Sensorineural:**

Hearing loss caused by damage to some or all of the nerves in the inner ear or along the auditory nerve. Sensorineural hearing loss is usually permanent (forever) and also can get worse over a person's lifetime.

### **Before or During Birth:**

• Infections that happen before the baby is born such as rubella, herpes, toxoplasmosis, syphilis, cytomegalovirus (CMV).



• Heredity- genetic errors



• Lack of oxygen at birth



• Possible association with birth weight of less than 1500 grams.



• Possible association with defects of the head and neck.

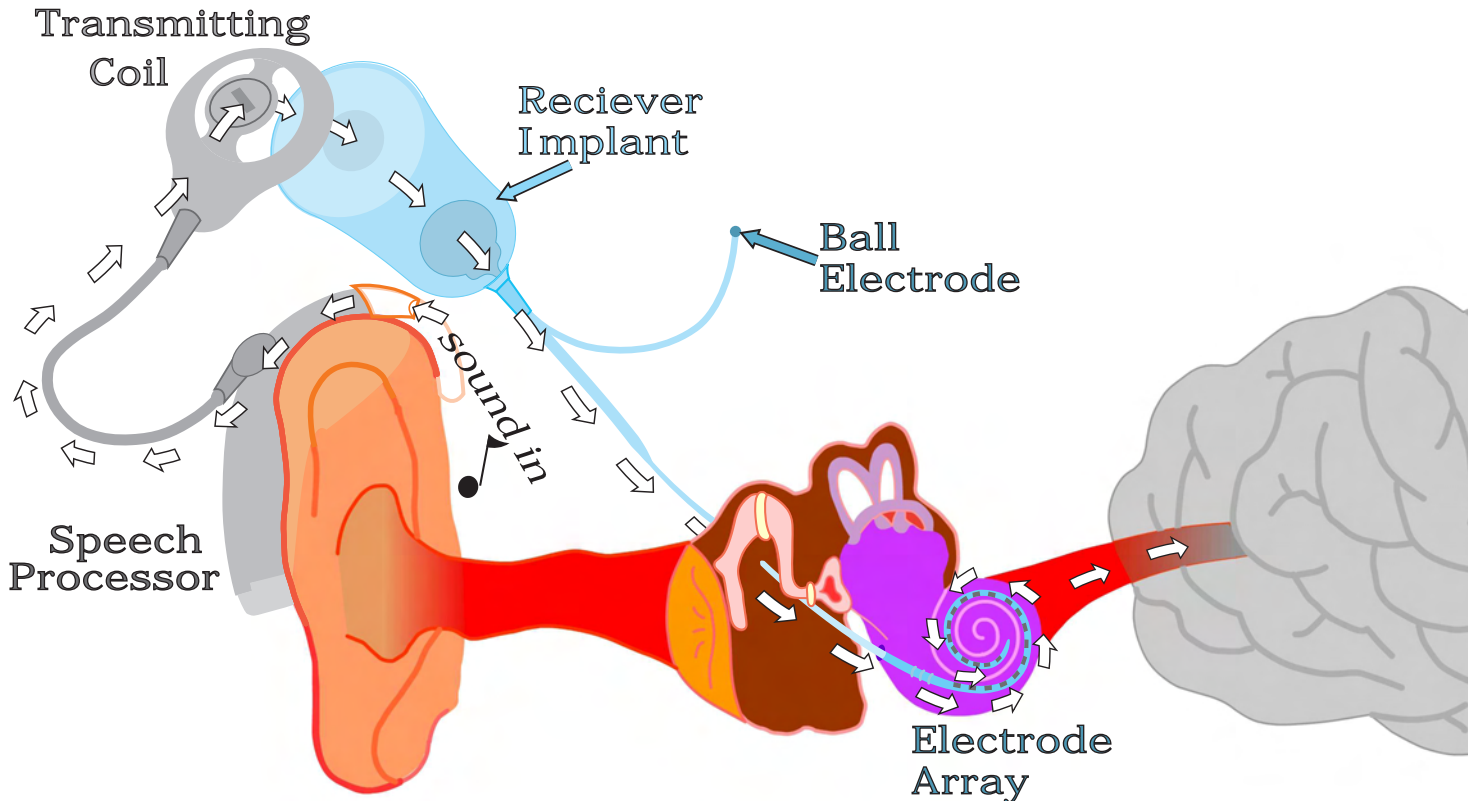
### **Later Onset:**

- Bacterial meningitis
- Ototoxicity
- Intense or too much noise
- Head injuries

### **Tinnitus**

Tinnitus is a noise of ringing or other sound in the head. It may happen with or without a hearing loss.

## How a Cochlear Implant Works

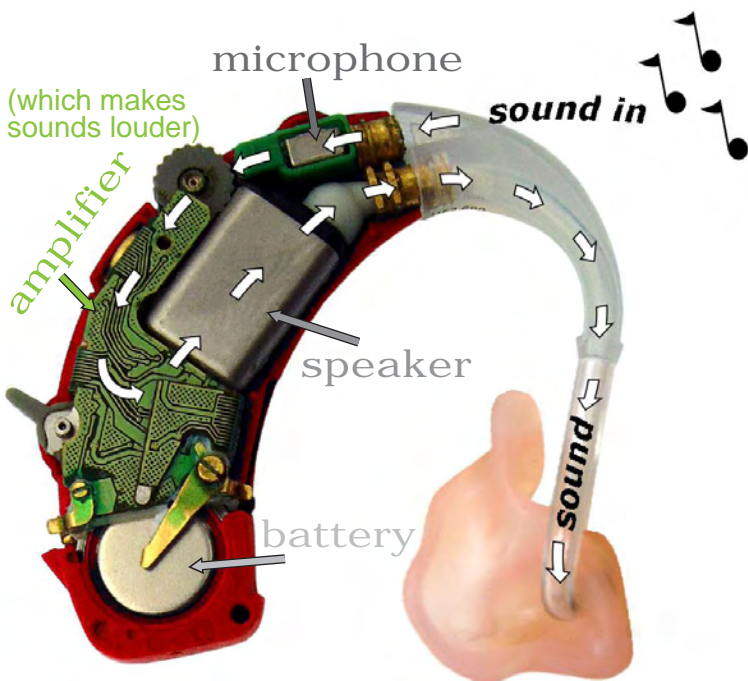


The cochlear implant is made up of two parts

- An implant and electrode array put into a person's ear during an operation – this part is used to help get the important sound information to the brain to allow the person to hear better.

- The speech processor which sits behind a person's ear (it looks a bit like a hearing aid) which helps to pick up the sounds happening around the person such as people talking, noises and the transmitting coil.

## How the Hearing Aid Works



The hearing aid microphone picks up sounds and sends them to the amplifier. The amplifier makes the sounds louder.

## Resources:

### CD-Roms (Interactive)



**Hearing Aid and Radio Aid CD-Rom**

Cat. #288a \$10.00

Cat. #288b(junior) \$10.00

**Cochlear Implant CD-Rom**

Cat. #293 \$10.00

## Useful Links:

### van Asch Deaf Education Website Audiology Subsite Website:

<http://www.vanasch.school.nz/audiology-index.php>



#### van Asch Deaf Education Centre, Christchurch, New Zealand

Welcome to the recently redesigned and restructured van Asch Deaf Education Centre website. Search our site using the boxes to the right, explore the menus above, or view the extensive [list of resources](#) for deaf and hard-of-hearing students available for you to purchase from our [Online Shop](#).

The van Asch Deaf Education Centre is a residential special school for deaf children, and is situated in Sumner, Christchurch, New Zealand.

The Centre strives to be a leading provider of quality educational programmes and special related services that meet the needs of deaf and hard-of-hearing students and their families, in the lower half of the North Island and the South Island of New Zealand.

The Centre also provides [services and support](#) for mainstream students and their teachers.

If you are new to our site, we suggest you get started using the buttons on the top row of the menu above:  
Information for [Families](#), [Professionals](#), [Media](#), [Students](#), [Everyone](#).

last updated Wed 19 Jun 08



What's New  
News n' Views  
New Resources  
Transition  
History Timeline  
NZSL/Deaf Studies Subsite  
NZSL Sign Search  
Search the Catalogues:  
Search this Site:  
Search NZSL Sign:  
Quick Links  
Audiology  
Base School Enrolment  
Board Update  
Cochlear Implant Programme  
Literacy  
News and Views  
NZSL and Deaf Studies  
Principal's Page  
Speech/Language  
Vacancies  
Online Shop  
If you would like to view the wide range of Resources the Centre provides, visit our Online Shop.

© Copyright 2008 van Asch Deaf Education Centre, Christchurch, New Zealand  
Address: Tram Street, Sumner, Christchurch Phone: 03 326 6000 TTY: 03 326 6000 Fax: 03 326 5346 Email: [info@vanasch.school.nz](mailto:info@vanasch.school.nz)

Website by Frog Web Works

Paul Perryman  
Paediatric Audiologist VADEC  
Ph/TTY: (03) 326 6009  
Fax: (03) 326 5346  
Email: [pperryman@vanasch.school.nz](mailto:pperryman@vanasch.school.nz)

## New Zealand Audiological Society



New Zealand Audiological  
Society Audiologists

- Home
- Members Login



- Public
- 7 Reasons why you should see a MNZAS Audiologist
- Find your MNZAS Audiologist
- Hearing Health Checklist
- How does my hearing work?
- Tell me about hearing aids
- Tell me about cochlear

# here to help you hear

DO you have a hearing problem?  
Take our online Hearing Health  
Test now! Click here.

Hearing Loss

[www.audiology.org.nz](http://www.audiology.org.nz)

## Southern Cochlear Implant Programme Paediatrics (SCIP-C)

# The Southern Cochlear Implant Programme

SOUTHERN  
COCHLEAR  
IMPLANT  
PROGRAMME



The Paediatric Programme

Located in a purpose-built facility at van Asch Deaf Education Centre in Sumner, Christchurch, the SCIP Paediatric Programme is well-situated to take advantage of the resources and multi-disciplinary team of professionals at van Asch involved in the identification, diagnosis, habilitation, education and well-being of deaf children and their families.

The core SCIP Paediatric team consists of an Audiologist/Manager, Habilitation Coordinator and Administration Coordinator.



Supplementary to this and also on site are: the service provided by the Advisors on Deaf Children, who are responsible for advising families of deaf children from identification onwards, the van Asch Early Intervention Centre, where children and their families are provided with individualised early intervention programmes, a Specialist Resource Team which provides specialist support for deaf children and their families in the areas of speech/language, literacy, deaf studies, and New Zealand Sign Language, and a Media Centre for the production of a range of multi-media instructional resources to support families and educational professionals working with deaf children and young persons. Access to support from a psychologist and/or family

counsellor is also available through the Centre's network of service providers.

Ph: 0800 275 7247 (0800 ASK SCIP)

Fax: 03 326 5346

Email: [phaggerty@vanasch.school.nz](mailto:phaggerty@vanasch.school.nz)

Website: <http://www.scip.org.nz/data/Paedprog.html>

## Southern Cochlear Implant Programme – Adult (SCIP-A)

# Cochlear Implant Programme

ERUAKAIVALE



The Adult Programme

The SCIP Adult Programme is sited at Bay Audiology in Christchurch city. The core members of the adult programme include a Specialist Surgeon, an Audiologist, Administration Staff, and access to a Hearing Therapist to provide a rehabilitation programme.



Ph: 0800 500 405, 03 355 3041

Fax: 03 377 3045

Email: [shctrust@xtra.co.nz](mailto:shctrust@xtra.co.nz)

Website: <http://www.scip.org.nz/data/adultprog.html>