THE FAMILY BOOK

— TE PUKAPUKA O NGA WHĀNAU

An introduction for the families and whānau of children diagnosed with a hearing loss

REVISED 2013
THANK YOU

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Flip the book over to find stories from families and young people.
Dear parents, families, and whānau

You’ve been given this book because you’ve just been told your child, or a child you care about, has a hearing loss.

You’re probably struggling to deal with this news. It’s likely you’ll have so many questions you really don’t even know where to start. This book was written to help you.

Deafness and hearing loss is not just about how much a person can or cannot hear. It’s about being able to learn and mix socially with other people.

Without sound it is difficult to learn words, the common building blocks of language. So some children will learn to use their hands – and their lips, face and body gestures – to communicate. This is sign language, which has a rich and proud culture associated with it.

Some may receive hearing aids or a cochlear implant, followed by intensive therapy so they can learn to speak.

Some children will use a mix of both hearing devices and sign language to communicate.

Many people have strong views about which of these approaches to choose. This can often present challenges for parents trying to decide what’s ‘best’.

The side of the book you’re looking at now gives an overview of hearing loss. With input from parents and professionals, it is meant as a basic introduction.

When you flip the book over, you can read stories from other parents who have stood where you now are. You are not alone. The stories include the views of young adults who describe their experience of growing up deaf.

Everyone’s situation is different, but all offer valuable first-hand information.

In the near future you’ll be making decisions about how you want your child to learn to communicate. A good thing to remember is that there is no one ‘right’ method of communication – what’s best is what works best for you and your child.

Best wishes from everyone who helped with this book.
Foreword

The Mackay family

Emily and Corina

The Vause-van Iddekinge family

Eddie

Nuie, Nuie Jr and Luisa

The Cooper family
WHAT’S GOING TO HAPPEN?

This page will help you understand where different professionals may start working with your child.

You will get help from the start

The first thing likely to happen within 48 hours of diagnosis is that a Ministry of Education Advisor on Deaf Children (AODC) will contact you. This is the person you will have the most contact with – specialist staff, including an AODC, will support you while your child is at school. They can answer many of your questions.

Our Advisor

__________________________________________

__________________________________________

Contact details

__________________________________________

__________________________________________

What happens next?

Diagnosis by audiologist

Notifies Advisor on Deaf Children (AODC)

Contacts you within 48 hours

Notifies ENT specialist

appointment with Ear, Nose and Throat specialist (ENT) within a few days

Early Intervention Teachers – will help support you/your child to learn

Speech-Language Therapist and others provide support

Not all children will have involvement with all of these people.
Your feelings
For most people, being told your child is deaf or has a hearing loss can be very painful. It’s natural to feel strong and mixed emotions – whether the loss is mild or severe. Suddenly the future looks very different.

If your baby’s hearing loss has been diagnosed as a result of the Newborn Hearing Screening Programme this news may be a total shock. There may be no one else in your wider family with any hearing difficulty. Around a quarter of children diagnosed with hearing loss have no known history of this in the family.

You may be deaf or hearing-impaired yourself and therefore better prepared for this possibility.

Or, if you’re a parent whose child is older, it could be a relief to get this diagnosis as it may answer concerns you have had about your child’s behaviour or development.

Whatever your situation, it is normal to experience sadness, guilt, anger or denial and to worry about this added new responsibility. Everyone is an individual and will react and cope differently.

GRIEF. Parents usually grieve for the life they had expected for their child – one without such a complication. Allow yourself to grieve – it’s natural.

GUILT. One or both parents may feel a sense of guilt that something they did caused the hearing loss or that they didn’t notice their child’s hearing loss sooner. It is important for parents to accept that they are not to blame.

FEAR of a future that will be different from most other families’ experiences.

ANGER may be triggered when least expected or when a parent finds it hard to fully express how they feel. Sometimes anger can be directed towards a partner, other adults, other children who can hear, family members or professionals.

Everyone’s emotions work differently and when this difference is between the mother and the father there is a potential for tension and lack of understanding.

What helps?
Taking ‘time out’, doing physical exercise and remembering to have fun can help. Even a gentle walk can be good for clearing the head.

It can help to talk about how you are feeling with someone you trust and respect. Or to talk with a professional counsellor – either alone or as a couple.

Beacon NZ
Beacon NZ is a free parent mentoring service. The person you talk with will have a child with a hearing loss. They have been professionally-trained to help families who have just been given a diagnosis and can help you understand the emotional journey you may be on.

Freephone 0800 535 636
Or email beacon.newzealand@gmail.com

Deaf Aotearoa
Deaf Aotearoa provides information and advice for Deaf people and their families and whanau. See www.deaf.org.nz

Parent to Parent
Parent to Parent provides support for families where a child has any special need, disability, or health impairment. See www.parent2parent.org.nz

“Our world crumbled that day and the sense of grief, loss and devastation was massive. As a first time mother I was shattered. Words can’t truly express how I felt that day but it was like losing a child, the child you picture whilst being pregnant, and the life they might lead when growing up.”

Corina, mother of baby Emily
Some parents may have a feeling of sadness that stays for a long time. Most parents say they learn to live with this feeling as they accept the reality of the diagnosis and form a new picture of what the future looks like.

Sometimes emotions are triggered when important stages of a child's life are coming up, such as when they start pre-school or school, or become a teenager.

With time, parents usually find that happiness becomes a more dominant emotion in their lives. Increasingly there are days when the focus is not on their child's hearing but on normal family life.

Talking with other parents

It's good to talk. Many parents say one of the things that really helped was talking with other parents who had been in the same situation. As well as getting emotional support from someone who understands, parents find there’s a lot of information they can share.

The New Zealand Federation for Deaf Children coordinates support groups for families throughout New Zealand. It also has free information kits for families who have just been told their child has a hearing loss.

Contact:

NZ Federation for Deaf Children Inc.

Freephone 0800 DEAFCHILD (0800 332 324)

Text 027 214 6901 or email deafchildren@xtra.co.nz

Will my child be okay?

Every child is different, so it is hard to predict just how well any child will do. Your love, acceptance and support will help.

Children with similar levels of hearing loss may progress very differently despite early diagnosis, appropriate hearing aids and the best efforts of their parents and teachers.

Some factors will have an important influence:

• the age when the child was diagnosed and started receiving help
• the amount of language they are exposed to
• the quality and amount of support from professionals
• the amount of family support
• their natural abilities
• whether or not they have other difficulties
• the amount of hearing loss and part of ear/s affected.

Audiologists say that in most cases hearing aids, Frequency Modulation systems (FM systems), or cochlear implants will greatly improve a child’s ability to hear sounds and to learn and understand speech.

Deaf or deaf?

Where a capital ‘D’ is used to write Deaf this refers to people who identify with Deaf culture and communicate by NZSL. A small ‘d’ refers to deafness generally. See section 3 for more information.

“The road ahead with Emily is unknown. We don’t know what her future is going to look like but as a family we’re damned excited about creating it with her. Signing or hearing, it’s going to be a great future regardless.”

Corina, mother of baby Emily
Early diagnosis is good news

Since the Newborn Hearing Screening programme started in 2007, hearing loss is being diagnosed much earlier. This means many more children are now getting help to learn to communicate by whatever method suits them best in their critical early learning years.

From an early age, most children with a hearing loss can receive hearing aids to help them make the most of what hearing they do have. They will then learn to communicate mainly by listening and speaking. There are several kinds of hearing aids and children will need new ones fitted as they grow. They will get support with using these and with learning.

Children with a severe or profound loss may receive a cochlear implant. Some people think of these as a 'bionic ear' because these can unlock the world of sound for even the most profoundly deaf. These children have intensive therapy to help them turn the sounds they are now able to hear into recognisable speech.

For cultural reasons, children and their families may learn sign language and use this instead of, or as well as, receiving hearing aids or a cochlear implant.

As children grow up

You will find deaf and hearing-impaired adults living fully independent lives, getting married, having families, competing internationally in sport and working in all types of jobs and careers: builders, doctors, shop assistants, business people, labourers and politicians.

Technology is increasingly making communication easier. This includes cochlear implants, texting, Skype, as well as electronic home and office equipment made especially to assist people with hearing loss. Employment law means employers have to be responsive to the needs of employees who are deaf or have a hearing loss.

“He is a lucky wee bloke: his hearing loss was diagnosed early, the technology exists to do something about it… It is very likely his life will unfold almost exactly as it would have if he’d been born with no hearing loss.”

Tamati’s mum.
Who will be helping us?
There may be lots of new people involved in your family’s life. Some professionals you are likely to meet early on are:

- an audiologist
- an Advisor on Deaf Children (AODC)
- a habilitationist
- a family counsellor
- an otorhinolaryngologist (ORL) – also known as an Ear, Nose and Throat (ENT) surgeon

The roles of these and other professionals are explained on page 74.

Paying for services
When your child is diagnosed with a hearing loss, most services to support your child’s hearing are free until your child leaves school. In New Zealand, most parents make use of our free public health and education systems. Hearing aids may be free for some people throughout their lives.

Some parents may choose to pay for private professional support, such as the services of a private audiology clinic, or a private speech-language therapy centre. Other parents may choose a mix of the two.

Understanding the professionals
Professionals will use a range of words you may never have heard before when discussing your child’s hearing. Over time, your knowledge about hearing loss, your child’s hearing levels and the technical language around this will grow, but at first you may feel you’re on a steep learning curve.

If a professional tells you something you don’t understand, ask them to explain it more fully for you. And if you still don’t understand, ask again.

Mild, moderate, severe and profound hearing loss
The situation and outlook for every child is different. Many factors affect the language, cultural practices and identity of a child with a hearing loss and their family. The extent of the loss or the supports a child needs will not be the only determining factors. As a general guide, if your child has:

- mild hearing loss – they will have difficulty hearing people speak in noisy situations and may need hearing aids.
- moderate hearing loss – they will have difficulty hearing people speak without the use of a hearing aid.
- severe hearing loss – they can just hear a voice if the person is shouting into their better ear but they are unlikely to understand what has been said. They will need powerful hearing aids or a cochlear implant.
- profound hearing loss – they may hear occasional sounds such as loud noises, but will not understand anyone talking to them, even if that person is standing close. They will need to rely on a cochlear implant, lip reading and/or sign language.

Remember: every child will be different.

See section 7 for more on this and the kind of support children are likely to need at school.
Different ways of communicating

Most people take communication for granted. We talk, we listen, and we gesture with our hands, face and body.

When your child is diagnosed with a hearing loss you will be asked to think about several different ways of communicating and which of these might work best in your situation.

Current research shows the best approach is to be flexible and encourage your child to explore as many communication options as they can.

There are two main ways deaf people communicate in New Zealand: with voices and with hands.

Voices: spoken communication

There are three parts to this.

- Speaking – involving the muscles and movements of spoken language. Speech features the use of sounds in syllables, words, and sentences.
- Listening – using hearing aids or a cochlear implant.
- Lip reading – learning to recognise the lip patterns made by other people that relate to the syllables, words, and sentences of speech. This can be combined with other forms of communication as people often look at facial expressions and lips to get meaning or expression.

Hands: manual or visual communication

Hands rather than the voice are used to convey meaning. There are several systems that come under the broad heading of manual communication.

- New Zealand Sign Language (NZSL). NZSL has its own grammar structure and comprises hand movements combined with facial grammar, expression, lip patterns and a system of body postures. NZSL is the main signing system used in New Zealand and is one of this country’s three official languages.

  NZSL is more than just a form of communication. Similar to other languages, it also belongs to a cultural group. NZSL unites many who are Deaf into a distinct community. For more on this see Section Three: Deaf culture.

- Signed English – this is rarely seen. It uses some Australian signs and some contrived signs.
- Sign-supported English – signs are used to represent spoken language such as English. The key signs are used while speaking.

Whatever method you choose – and there is no right or wrong one – it is very important your child learns to interact and respond to other people as early as possible. This will be the key to their ability to socialise and learn.
Strategies that may be used alongside either of these

- Fingerspelling – 26 signs are used to represent the 26 letters of the alphabet
- Gesture – natural movements of the body, especially of the hands and arms.
- Mime – often used informally with deaf children until language is established.
- Written – using pen and paper.
- Makaton – internationally recognised signs and symbols providing limited language and communication for children and adults with a range of disabilities and learning difficulties.

You may use one method or a mix of several. You may start out one way and later change to another. Every child is an individual and every family is different. Choose what suits you.

What should I expect at home?

It’s important your child grows up as closely as possible to the way any hearing siblings and other children do. You need to have fair yet realistic expectations of them to help them develop into strong and independent adults. Unless there is another physical or special reason not to, they should be expected to take part in the same daily routines as the rest of the family, such as drying dishes, making their school lunch and tidying their room – so that it is clear they are part of the family.

“Why can’t I hear?”

There will come a time when your child will want to know why they can’t hear as other children do. They may want more and more details as they get older. Keep your answers simple and use language appropriate to their age level. Only respond to what has actually been asked, rather than going into a long explanation – children’s attention spans are usually short. If they want to learn more, they will ask.

Older deaf people as role models

Many children think their hearing loss will fix itself as they grow up. Some deaf children who have not met older people who are Deaf even think that the Deaf adults just died off. As children learn to understand more, they can benefit from meeting older deaf or hearing impaired role models. Meeting older people who are deaf helps children develop their own Deaf cultural identity, psychologically, socially, and emotionally. They can meet others through groups such as Deaf Aotearoa or Deaf Societies throughout New Zealand.

Helping your child emotionally

All of us thrive on a sense of belonging and self worth. Being open and confident about your child’s hearing loss will encourage them to feel good about it too. This can often also influence the attitudes of family, friends and others. You can lead the way.

Making friends

Like any other child, your child will want to make friends early on. While most other children they meet are likely to be hearing, you can also introduce them to other babies or children who are deaf, through parent support groups or ECE centres and schools for the deaf.

Children with hearing loss are usually able to interact socially on the same terms with children who do not have a hearing loss.

The Hearing House runs a workshop-based mentoring programme for deaf young people and teenagers, led by hearing-impaired adults.

See page 79 for more details.
What about brothers and sisters?

If you have other children, involve them in the special activities you do with your child who has the hearing loss. All of your children will learn and benefit from each other. Here are some ideas:

- Listen to what brothers and sisters think or want to contribute. Let them teach you what it’s like for them, and ask them for feedback.
- Help them accept that their brother or sister has a hearing loss and encourage them to be open and honest about their feelings.
- Show all your children you value them individually, reminding them of the good things about being part of your family.
- Help them to understand why there are times when their sibling needs more attention but try to schedule special one-on-one time with brothers and sisters also.
- Recognise stressful times within your family and plan to minimise negative effects, for example by giving siblings some strategies to cope with transitions that may be difficult for the child with a hearing loss.
- Allow your children to settle their own differences between themselves and praise them for doing so.
- Don’t forget to laugh and have fun together.

Adapted from “Brothers and Sisters - Special Part of Exceptional Families” T.H. Powell and P.A. Gallagher, 1992.

As well as adjusting to a sibling with hearing loss, brothers and sisters may be faced with awkward and hurtful questions, such as “What are those funny things in your sister’s ears?”, “Why does your brother speak funny?”, “What’s wrong with her?”

Siblings need to know how to respond. If they have a good understanding of their brother’s or sister’s hearing loss this will help them answer those tricky questions in a way that also educates other people.

Different behaviours explained

Sometimes your child may behave in a way you do not understand. Here are some examples and possible solutions.

**COVERING BOTH EYES**

If your child can’t see you they may think they are stopping you from communicating something to them, similar to the way other children may block their ears. Take a short break and try again.

**WAKING IN THE NIGHT UPSET OR UNSETTLED**

Your child cannot hear they are okay at night, so try using a nightlight so they can see that everything is okay.

**RUNNING THEIR HAND ALONG THE WALL IN A DARK HALLWAY**

They are doing this to help themselves navigate better. Leave the hall light on.

**SQUEALING, SPEAKING LOUDLY, OR YELLING**

Sometimes a child does this to ‘test’ whether they can hear themselves, or they may want your attention. They may have no idea how loud they are. Explain to them that it is okay to do this outside, but inside it can hurt other people’s ears.

**THROWING TANTRUMS**

Most children do this at some stage, but a hearing-impaired child may be doing so because they are having difficulty communicating. There is no ‘best’ way to deal with this, but encouraging your child to use their language may help identify the cause.

**DOMINATING SOCIAL SITUATIONS OR CONVERSATIONS**

Your child may do this so they don’t have to try and understand what the other person is telling them. Encourage them to take turns.

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**Parent to Parent** can offer support to siblings aged 8 to 18 through their SibSupport programme. See [www.parent2parent.org.nz](http://www.parent2parent.org.nz)
Tips and ideas

* Love and encourage your child. Smile often – because what they see means so much more to a child with a hearing loss.

* Coming to terms with and having a good acceptance of your child’s hearing loss will help your child’s sense of self-worth.

* Talk to other people and read as much as you can so you have plenty of information to base your decisions on.

* Talk to your baby even if he or she is profoundly deaf. They will still learn from you by doing this and it’s never too early to start.

* Consider learning sign language with your child even if they are not profoundly deaf.

* Think about using teletext captioning on your TV even before your child learns to read – so they can begin to understand the importance of written communication.

* No matter how much you do for your child, you may always feel that it is never enough. Don’t let anyone intimidate you or make you feel guilty because you can’t manage more. Everyone has different strengths and limits of coping.

* For many children, how successful they are will depend on how positively you, your other children, and other significant adults – such as grandparents – respond to the hearing loss.

* Every smile, funny face and word counts. Their coos, gurgles and leg and arm movements are how they are communicating back to you.
SECTION 2

DEAFNESS AND CULTURE
Professionals helping support your child will want to be considerate of any special cultural needs your family has. Let them know if there is something you want them to be aware of.

**For example:**

- If someone is visiting your home you may want them to take their shoes off at the door, or not put their equipment on food preparation surfaces such as the kitchen table.
- If English is not your first language you can ask for an interpreter when you go to an appointment, such as when you visit an audiologist, or on a pre-school or school visit. Ask your Advisor on Deaf Children (AODC) about how to request a translator.
- A culture, family, or community can have special beliefs about hearing loss. For example, some cultures warmly embrace deafness while others may view it less positively. Sometimes talking about your beliefs with others will help them gain a better understanding if any issues arise that need to be resolved in a culturally-sensitive way.

“I don’t care that I’m deaf. I can still be involved in sport. I play rugby. I can’t hear the whistle so when I explain I am deaf they use a flag. I go to the gym with my mum. I belong to Poly [dance] club.”

Tagi, student

“Most deaf children cope well and have lots of friends… When my parents realised I was deaf they learnt how to sign.”

Amber, student
“I’ve got loads of friends who are really supportive. Some friends really understand how it works. The other night I was at a party and my girlfriend brought some batteries to me because the batteries [on hearing aid] had run low. Other friends have done that as well.”
Josh, age 21

“Jamie has a cochlear implant. He has topped his class for the past three years and also has won the school’s Piano Cup for the past two years. In the International Competitions and Assessments for Schools (ICAS) of science, English, and maths he was placed in the top 2% of the country for English, the top 3% for maths and the top 9% for science.”
If you are Māori

There are special issues you may need to consider and talk through with your whānau when deciding how you want your tamariki to learn to communicate:

- Māori culture has a strong oral tradition that talks of ‘listening with our ears not our eyes’. Making direct eye contact is seen by some people as a sign of disrespect. If this is the case in your whānau, lip reading is less likely to be one of your tamariki’s hearing strategies.
- The wearing of hearing aids – especially cochlear implants which require surgery – may bring particular issues because of the involvement of the head.

Kaitakawaenga

These are Ministry of Education Māori liaison advisors who can work with you, your whānau, and your tamariki in your home, on marae, kura, wharekura or Kohanga reo. Your Kaitakawaenga will help support culturally appropriate relationships between your whānau and the professionals who work with your child.

Ruamoko Marae – the world’s only Deaf Marae

Ruamoko Marae is in the grounds of Kelston Deaf Education Centre in Auckland.

Māori and Deaf staff and whānau provide support to students and their families in educational planning meetings, hui, a Māori Studies programme, carving, Te Reo classes, trips, and advocacy.

“Tua Wera” – a Southern whare, for deaf students

Van Asch Deaf Education Centre (VADEC) in Christchurch has a dedicated whare wanaka named “Tua Wera”, which is used for school and regional support meetings and activities. VADEC also offers Māori books, posters, and DVDs through its Media Centre. You’ll find a free resource catalogue on the van Asch website. (A wanaka is a place of learning. The term “wananga” is used in the North Island.)

Contact:
Van Asch Deaf Education Centre, Truro Street, Sumner, Christchurch
Phone and TTY 03 326 6009
Fax 03 326 5346.
Email info@vanasch.school.nz
Website www.vanasch.school.nz

Sign language in Māori

While there’s no separate Māori sign language, there are Māori signs for Māori concepts. Both Māori and Pākehā Deaf use NZSL as a common community language. Māori Deaf people have developed and continue to develop signs relating to Māori culture.

A quarter of all 24,000+ people who communicate using NZ Sign Language also speak Māori.
SECTION 3
DEAF CULTURE
THE DEAF COMMUNITY

As technology improves, many deaf people are now able to speak, listen, and mix socially using spoken language while at the same time as identifying themselves as being Deaf and part of the distinctive Deaf community. Although many hearing parents may feel sad when their adolescent deaf child begins to be more involved in the Deaf community (as if their efforts in bringing them up “normally” have been wasted) it can be a time to celebrate the child’s self-discovery, their acceptance of their own deafness and an embracing of both Deaf and hearing worlds. It is often an enriching experience for the family to enter into the Deaf community. The Deaf community is often a place of belonging and it becomes particularly important for deaf children who grow up with no exposure to Deaf culture.

The Deaf community is a wide network of people whose culture is based on the shared experience of deafness and use of a common language – sign language.

New Zealand’s Deaf community is made up of a strong network of social, sporting, religious, and political organisations. Most members were born deaf or became deaf early in life. There are also some hearing members, including friends, family members and those who work with Deaf people, such as interpreters and community workers.

The Deaf community is very active and hosts many events, such as:

- the New Zealand Deaf Games, held every year at Labour Weekend
- Deaflympics, held every four years in a different country
- Deaf short film competitions
- New Zealand Sign Language (NZSL) storytelling events
- camps for young Deaf New Zealanders, sometimes including Deaf teens from overseas
- other national and international gatherings of Deaf political and cultural organisations.

“Listening is hard. Talking is hard. Signing is easy. It’s good to have lots of options.

I meet up with other deaf children in the region at ‘Keeping In Touch’ (KIT) day which takes place about five times a year. We always feel comfortable with each other. I make new friends there and keep in touch with texting - but the best form of distance communication is Skype. It’s the most direct way to talk. We sit and Skype for ages!”

Amber, student

To find out about your local Deaf community, Deaf Aotearoa has a full list of organisations at www.deaf.org.nz or check the phone book/internet under Deaf Association or Deaf Society, or email national@deaf.org.nz

“It was not until I was 18 that I finally went to the Deaf club at the encouragement of my father, and I met other Deaf people my age. I was finally starting to discover who I was as a Deaf person and for the first time in my life, I belonged somewhere. I had friends with whom I could carry out a full conversation, without having to ask them to repeat themselves so I could understand. I had finally found my place in the world and I loved it. I learned more about my identity, I embraced it and wanted to know more!”

Kellye
NEW ZEALAND SIGN LANGUAGE (NZSL)

NZSL is a visual language with its own grammatical structure. It is a complete language capable of communicating a full range of ideas. It uses a variety of hand movements which make optimal use of the space around the body.

The signs show meaning through hand shape, orientation, movement, and location. Accompanying these are facial expressions, lip patterns, and a system of body postures which are essential elements of the language.

NZSL is visual – the eyes gather the information. It is not a written language.

English, on the other hand, is an oral/aural language. It uses the voice to convey information and the ears to gather information. English, as a written language, has its own syntax and grammatical rules that are different from those of sign language.

NZSL is taught in adult education classes and to a higher level through Victoria University’s School of Linguistics and Applied Language Studies. See www.deaf.co.nz for information about where you and your family can learn NZSL.

In 1998 a comprehensive NZSL dictionary was published: http://nzsl.vuw.ac.nz

The Māori Deaf community has also developed its own “dialect”, with signs appropriate to Māori language and culture.

Most countries have their own sign language, so when Deaf people from different countries gather for conferences and sporting events they communicate through a specially devised “International Sign” system.

Every country has its own form of sign language. In Australia it is Auslan, in America it is American Sign Language, in New Zealand it is NZ Sign Language. NZSL is one of New Zealand’s three official languages, alongside Māori and English.

NZSL in schools

Students who use NZSL have the right to go to their local school and receive appropriate support.

For information on schooling via NZSL through the Deaf education centres go to www.kdec.school.nz and www.vanasch.school.nz

NZSL can be studied as a language as part of the New Zealand Curriculum in Year seven and eight. The Ministry of Education has a web resource: Thumbs Up! – An introduction to NZSL. Its aim is to increase the numbers of hearing students and teachers who know the language. See nzsl.tki.org.nz

Using an NZSL interpreter

Interpreters help hearing and Deaf people communicate. It is important for Deaf and hearing people to speak directly to each other and to allow the interpreter time to transfer the full message. The interpreter will not be involved in the conversation as this is against their code of ethical practice. Interpreting is intensive work so for meetings of more than 20 minutes two interpreters may be needed.

Around 20,000 people in New Zealand use NZSL. The Government uses NZSL interpreters in Parliament and for major announcements. NZSL was used in the briefings after the Christchurch earthquake in February 2011.

You don’t always have to know NZSL to have a conversation with a signing Deaf person. Many have some lip reading skills, so face them and speak clearly without slowing down or distorting your speech. Another option is to use a pen and paper, or if you don’t have these, write or draw in the air.
THE RIGHTS OF DEAF PEOPLE

In 2008 New Zealand ratified the UN Convention on the Rights of Persons with Disabilities. This convention is based on the Universal Declaration of Human Rights and includes several references to the rights of Deaf people to access sign language, deaf culture and their identity as a person who is deaf or hearing impaired.

Article 21 of the Convention requires countries who have signed this document to ensure Deaf people can access government information and services.

Searching for identity

Children usually become part of the Deaf community through existing family connections. However, children who have no previous links may also be attracted to the Deaf community, particularly as they get older and start searching for a sense of identity. They may want to learn NZSL if they don’t already sign.

MEETING DEAF PEOPLE FOR THE FIRST TIME

Many parents, when faced with adult Deaf people for the first time, generally have two main responses:

So that’s what my deaf child might look like in 20 or 30 years’ time. That’s not so bad. They grow up, leave home, work, marry, travel, buy houses, have kids, and go through most of the normal experiences of life without their parents needing to be there all the time. And plenty of them are happy, intelligent, good-looking, funny, interesting people. Well, what a relief!

or…

But why, after all those year of helping my child to speak, hear, and get along in the hearing world, do they end up spending so much of their time with other Deaf people? Does that mean we and their teachers failed, that they can’t survive out there in the hearing world…?

For many, socialising with other Deaf people provides confidence, a feeling of belonging, the opportunity to meet and become friends with a wide variety of people with whom they don’t have trouble communicating, and a way to easily share knowledge, ideas, and dreams. We all want to feel we’re part of a community, and we are all drawn to people who will reinforce these feelings in us.

Parents may feel uncomfortable if their child suddenly decides to identify themselves as Deaf. They may wonder if they made the right choices for their child. With genuine communication and acceptance, involvement with both Deaf and hearing cultures can be an enriching experience for all. Most parents who take up opportunities to mix with the Deaf community alongside their deaf child find this a vital resource in bringing up their children.

“Just before Christmas we attended the Wellington Association for Deaf Children’s Christmas party. We were nervous about going. I’m so glad we did. We met other deaf people who lived normal lives, attended university, and had hearing partners and children.”

Corina, mother of baby Emily
Visual prompts

Because a Deaf person usually perceives the world through their eyes rather than their ears, the culture has evolved certain behaviours and values.

This is reflected in the physical way Deaf people gain each other’s attention. For example, they tap shoulders and wave to indicate taking turns in conversations. Many Deaf people arrange their living areas to maximise visibility.

They may use round tables rather than square, strong indoor lighting, and plain walls rather than distracting, patterned ones.

Knowing some simple signs will help ease the way when you’re meeting a Deaf person who uses NZSL. The signs shown on the next page give you a good place to start.
Common Gestures

Hello
Come here
Go
Stop
Wait
Look
Well done!
Perfect
What?/Where?
I don’t know
Yes
No
Bad
Oh no!
Good
High 5
SECTION 4
HEARING LOSS AND HEARING TESTS
HOW WE HEAR

**Outer Ear**
Air around us carries sound through sound waves. The outer ear collects these sound waves and sends them along the ear canal.

**Middle Ear**
At the end of the ear canal is the ear drum. This bounces or vibrates, just like when you hit a drum. Sound waves pass from the ear drum onto three tiny bones in the middle ear called the malleus, incus, and stapes (commonly known as the hammer, the anvil and the stirrup – because that’s what they look like). When these bones vibrate and move, they carry the sound waves into the inner ear.

**Inner Ear**
The inner ear contains the cochlea, our ‘snail-shaped’ hearing organ. The cochlea is filled with fluid and thousands of tiny sensory hair cells. These hair cells turn all the sound vibrations from the middle ear into electrical signals, which then travel up the nerves of the auditory pathway to the brain for processing.
WHAT CAUSED MY CHILD’S HEARING LOSS?

Often it is hard to say what the cause is. In 50-60% of cases of permanent hearing loss in New Zealand no known cause is identified.

Hearing loss is described as either congenital or acquired, as shown in the summary below.

Congenital hearing loss
This is when a baby is born with hearing loss and in most cases is a result of the child’s genetic make-up. This is why you are asked if your family has any history of hearing loss. The hearing loss may still have a genetic cause even when parents hear normally. Although in some cases, there may be a family history of hearing loss, most of the time there is none.

Babies may be affected by an illness during the mother’s pregnancy, such as cytomegalovirus or rubella, or exposure to certain drugs. Complications when the baby is being delivered (such as extreme prematurity) can also lead to hearing loss. Approximately 90 children per year may be born in New Zealand with permanent congenital hearing loss.

If we have more children will they also have a hearing loss?
The answer to this question may be ‘yes’. Your otorhinolaryngologist/Ear, Nose and Throat (ENT) specialist can arrange for genetic testing for some of the more common types of genetically carried hearing loss. We know there are many genes involved in the cause of deafness, the most common of which is the connexin 26 gene. Understanding the genetics of hearing loss is a very new and rapidly developing field.

Your ORL/ENT specialist may also offer an MRI or CT scan of the ears, and cytomegalovirus (CMV) testing to help diagnose the cause of the deafness. This can also help determine if the hearing is likely to stay stable, or if it might change in the future.

Syndromes
Most cases of genetic hearing loss are not associated with any other genetic abnormalities. There are, however, some genetically inherited conditions where hearing loss is associated with other problems, such as Waardenburg’s Syndrome, Usher’s Syndrome and Turners Syndrome.

For more information about syndromes see www.raisingdeafkids.org
Acquired hearing loss

This is when a child ‘acquires’ or gets a hearing loss later, usually after having normal hearing. Children with acquired hearing loss can be divided into two groups:

- children whose hearing deteriorates gradually
- children who lose their hearing suddenly.

Children whose hearing deteriorates gradually

Sometimes children with normal hearing may experience a gradual loss. A few children who have a mild loss, this may gradually worsen to a severe hearing loss. This should be thoroughly investigated by an ORL/ENT or audiologist. In most cases, this is thought to be a result of a genetic cause, but in the first few years of life it may be secondary to congenital CMV (cytomegalovirus).

Children who lose their hearing suddenly

Some illnesses, such as meningitis, encephalitis, measles, mumps, and high levels of jaundice can cause sudden hearing loss. Certain medicines, including gentamicin, neomycin, streptomycin, kanamycin, cisplatin, and quinine sulfate (which may be necessary to treat serious illnesses) can also cause sudden hearing loss.

Meningitis

Meningitis can cause a hearing loss or deafness when the inner ear becomes infected with bacteria. Immunisation is available for various types of meningitis, including a free vaccination from the age of 6 weeks. Children who have had meningitis need to have a hearing test as soon as possible before leaving hospital and have their hearing monitored frequently.

Noise damage

A sudden, single extremely loud sound, or exposure to loud noise over a long time, can cause a traumatic hearing loss. This is called noise-induced hearing loss. It is most often seen in adults who work in noisy industries.

Types of hearing loss

Hearing loss can result if there is a problem in any part of the hearing pathway – in the outer, middle or inner ears, or in the complex pathway of nerves leading to the brain. There are several types of hearing loss.

Conductive hearing loss (CHL)

This is caused by a blockage in sound transmission to the inner ear because of problems affecting the middle ear, the hearing bones, or the ear canal. The degree of hearing loss varies but you cannot be completely deaf with just conductive hearing loss.

Common causes

BLOCKED EUSTACHIAN TUBE

The tube that runs from the middle ear to the back of the throat (see diagram page 27, 5) may become infected and swollen. The swelling prevents the tube from opening normally and the middle ear cannot be aerated or drained. This may lead to an infection in the middle ear called Acute Otitis Media, or may cause a build up of fluid behind the ear drum. This is sometimes called ‘Glue Ear’. Ear infections and Glue Ear are very common among children, as their Eustachian tubes are narrow.

If your child has been diagnosed with a permanent hearing loss, Glue Ear will make their hearing temporarily worse.

Treatment

A blocked Eustachian tube is usually treatable. Often middle ear problems clear up without medicine but sometimes they can linger for months or even years. If your child has a middle ear problem, it is important to consult your family doctor who may refer you to an ORL/ENT specialist.

If your child has been diagnosed with a permanent hearing loss, Glue Ear will make their hearing temporarily worse. Your doctor will arrange a hearing test if your child has had persisting middle ear fluid for more than three months. If the problem is long-standing and associated with a hearing loss or ear drum damage, your child will be referred to an ORL/ENT specialist who may discuss with you inserting grommets. These are small tubes (also called ‘ventilation tubes’) which are put into your child’s ear drum to aerate the middle ear and help prevent the build up of the fluid that causes Glue Ear.
External Auditory Canal Atresia (with “Microtia”)
Approximately 20 children a year are born without an external ear or an ear canal. In most cases, there is a normal ear and normal hearing on the other side. Children with this condition are usually referred to a specialist team consisting of an ORL/ENT specialist, a plastic surgeon and an audiologist working together.

Sensorineural hearing loss (SNHL)
If the outer and middle ear work well, the cause of the hearing loss is usually in the inner ear. This is the part of the ear which creates electrical signals and sends them along the auditory nerve to the brain.

Common causes
The most common cause is genetic, usually a cochlea that has not formed correctly. Other causes include:
- cytomegalovirus (acquired while the baby is developing in the womb)
- a difficult birth
- high levels of jaundice
- infections such as mumps, measles and meningitis
- drugs given to treat diseases.

Treatment
This type of loss is almost always permanent. There is rarely any medical treatment. Hearing aids will be fitted. Where hearing loss is more significant, a cochlear implant may be recommended.

Mixed hearing loss
Some children may have both a sensorineural loss and a conductive loss – a mixed hearing loss. If a child with a sensorineural hearing loss gets a middle ear infection, their hearing can become temporarily worse until the middle ear problem has cleared up.

Auditory Neuropathy Spectrum Disorder (Auditory Dys-synchrony)
If tests show the problem lies in a lack of synchrony (timing) from the cochlea or the sensory nerve going to the brain, this is an Auditory Neuropathy Spectrum Disorder. This can have widely varying effects. A child with auditory neuropathy spectrum typically does not hear well and the hearing may fluctuate from day to day. The most common cause is a high level of jaundice at birth, often associated with a difficult birth or extreme prematurity. In some cases, it may also be genetic. Tests are available for this.

Some children may manage to learn to speak and require little help. Others, who appear to be functionally deaf, may benefit from hearing aids or a cochlear implant. How much a child may benefit from hearing aids or a cochlear implant can be uncertain. However, teams of professionals involved with these children will support families in making the best choice to help their child, based on as much information as they can learn about the child’s hearing and nervous system function.

Auditory Processing Disorder
Another type of hearing problem is an auditory processing disorder. This is where there is a normal hearing at the level of the ear but a problem with the processing of complex sounds, such as speech in noise, at higher levels of the hearing pathway. The use of Frequency Modulation systems (FM systems) and some computer-based habilitation programmes may help Frequency Modulation Systems with this type of disorder.
Unilateral hearing loss

In most cases hearing loss affects both ears and is known as bilateral loss. When only one ear is affected this is a unilateral loss.

In quiet situations, a child with unilateral loss will hear well by relying on their better ear. However it can be difficult for them to figure out where sounds are coming from. In a noisy environment, it is hard for them to understand speech clearly, especially on the hearing-impaired side and particularly in a group discussion.

A child may be thought of as having selective hearing and as with any child with a hearing loss, they will often be tired from having to work hard to listen with only one ear functioning correctly.

Children with a unilateral hearing loss are not always eligible for services from an Advisor on Deaf Children (AODC) – contact Special Education staff at your regional Ministry of Education office for information.

Sometimes certain types of hearing aids and other assistive devices are recommended for children with unilateral hearing loss.

See Section 5: Hearing aids, cochlear implants, and other assistive technology.

Causes of changes in hearing levels

Glue Ear

This can occur as a result of a middle ear infection and is the most common reason for a change in hearing levels. Glue Ear causes a temporary conductive hearing loss.

See page 29.

If a middle ear problem is making your child’s hearing worse, seek medical advice and ask your audiologist for a hearing test. Hearing aids may need to be adjusted if there is a significant change in hearing thresholds, and as this problem is likely to be temporary, it is important to ask when hearing and hearing aids need to be rechecked.

Wax

This can cause a temporary conductive hearing loss. Children who use hearing aids tend to have greater wax build up which can affect hearing levels. Wax can also block the sound outlet of the hearing aid (see Section 5).

A doctor, ear nurse or ORL/ENT specialist can check your child’s ear canal and wax can be removed with minimum discomfort. Do not try to clean wax out yourself, as you may push the wax further into the ear causing damage. Ear syringing (water cleaning) is not recommended to clear wax. There are other more modern methods such as suction, available from medical professionals such as ear nurses, ORL/ENTs and some doctors.

Unexplained change

Sometimes a child’s hearing will deteriorate and there will be no sign of a middle ear problem or wax. This usually means the sensorineural hearing has been affected and the ability to hear is further decreased. In most cases, this type of change is due to the nature of a child’s hearing loss. The changes in hearing may be sudden and dramatic, or they may happen very slowly.

If your child has a sudden or dramatic drop in their hearing levels without any signs of a middle ear problem, you should see your ORL/ENT specialist or audiologist immediately.

A hearing test should be carried out to confirm the amount of change and if action is needed.
Combination of causes

Occasionally a child’s hearing may worsen through a combination of factors: the child’s own sensitivity to noise exposure and their exposure to high levels of environmental noise. Children with a hearing impairment can be affected by long term exposure to high levels of noise in the same way as a person with normal hearing.

Protect the child’s hearing in the same way as for other children, when taking part in noisy activities.

If an audiologist detects a significant unexplainable change in a child’s hearing levels, they will refer them for medical advice.

Vision problems and deafness

Vision is especially important for children with a hearing loss. Contact with the outside world becomes very limited if a child with hearing loss goes on to suffer vision loss. Early identification and correction of minor visual problems such as short-sightedness is therefore vital.

Usher’s Syndrome

All children with hearing loss should have a full eye examination to check for conditions such as Usher’s Syndrome, a rare condition that involves hearing loss followed later by vision problems. Early signs of complications such as Usher’s Syndrome are detected by examining the retina or back of the eye.

UNDERSTANDING HEARING

Sound

To understand your child’s hearing loss it helps to understand something about sound itself. Sound happens when a moving or vibrating object makes the air around it move. Sound travels through the air in waves. These sounds waves are invisible, we can’t see them but we can hear them. Sound also passes through objects such as walls and floors.

When we want to describe sound waves, we talk about their ‘frequency’ or ‘intensity’.

Frequency

This is the ‘pitch’ of a sound. When sound waves are made by something vibrating slowly, there is a low frequency sound. An example of this is the sound of a fog-horn or drum.

When the sound waves are made by something vibrating quickly, there is a high frequency sound. An example of this is a whistle, small bell, or bird song.

Sound frequency is measured as the number of vibrations per second or Hertz (Hz). The greater the Hz number of a sound, the higher its frequency. The human ear can hear a wide range of frequencies, from about 20 Hz to 20,000 Hz. However, the sounds of speech are concentrated in the range of 125 Hz to 8000 Hz and these are the frequencies tested in a hearing threshold test.

Intensity

This is the ‘loudness’ of a sound. When sound waves are made by an object vibrating gently, the sound waves are small. They are described as low intensity and the sound will be soft. If the object vibrates strongly, the sound waves will have greater intensity and the sound will be loud. The greater the intensity of vibration, the bigger the sound waves and the louder we hear the sound.

Here are some things you can do to help your child if they have unilateral loss.

- Teach them to sit or stand where their best ear is closest to sound sources, and encourage people to direct their speech towards the best ear.
- Get them to sit near the front of the class at pre-school and school.
- Ensure there is good lighting in the classroom so they can clearly see the face and lips of others speaking to them.
Normal young, healthy ears can hear frequencies as low as 20Hz and as high as 20,000Hz. However, we test hearing between 250Hz to 8000Hz, as most speech sounds are in this range. 125Hz may not be tested with very young children due to time and child attention constraints.

Audiograms

An audiogram is a map of a person’s hearing. It’s a way of showing the softest sound a person says they can hear at different frequencies (pitches) of sound. The average hearing threshold level for young adults with normal hearing is 0 dBHL on the audiogram.

The frequency of the sound is shown across the chart in the “speech banana” audiogram below, from low pitched sounds on the left (125 Hz) to high pitched sounds on the right (8,000 Hz). The intensity (loudness) of the sound is shown down the side of the chart, from soft sounds at the top (-10dB) to loud sounds at the bottom (120dB).

Audiologists use symbols on the chart to show which ear is being tested and how the sound has been presented to the ear. The greater the hearing loss, the greater the decibel level needed in the ear for the child to just detect the test sound. Audiologists categorise and describe hearing loss according to its degree. The audiogram below illustrates the decibel hearing levels corresponding to these degrees of hearing loss. It is commonly know as ‘the speech banana’.

Adapted from the American Academy of Audiology
www.audiology.org
The “speech banana”

Human speech consists of vowels and consonants at different loudness and frequency levels. They are recorded on the audiogram as a so-called “speech banana”. It is an easy way to check whether the entire spectrum of speech is still audible and how someone’s hearing has changed over time.

The familiar sounds audiogram

This chart shows how some everyday sounds, including speech, relate to the different frequency and intensity levels on an audiogram.

Ask your audiologist or AODC to plot your child’s hearing loss onto a copy of the Familiar Sounds Audiogram. This will help you understand what everyday sounds your child is able to hear.

Simulations of the effects of hearing loss can also be demonstrated by the audiologist using a computer in the audiology clinic. Ask your audiologist to arrange a simulation for you. This will help you understand the best ways to communicate with your child if they have hearing aids, FM aids or cochlear implants.
## Describing Hearing Loss

The term “hearing loss” is used together with a decibel level, or range of decibel levels, across different frequencies. It’s hard to relate a person’s degree of hearing loss to how well they will be able to hear someone speak.

The following table has categories of hearing loss and explains what it might sound like to a person with that degree of loss. It also describes the technical support they might need.

### Describing hearing levels in day-to-day terms:

<table>
<thead>
<tr>
<th>Range</th>
<th>What it sounds like (without aids or CI)</th>
<th>Habilitation options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal (-10 to +15dBHL)</td>
<td>A child hears normally</td>
<td>—</td>
</tr>
<tr>
<td>Mild loss (16-40dBHL)</td>
<td>Ask your audiologist to arrange a simulation of what it might be like for your child to hear with this level of hearing loss.</td>
<td>In some cases, a child may need a classroom amplification system or hearing aids</td>
</tr>
<tr>
<td>Moderate and moderate/severe loss (41-70dBHL)</td>
<td>Able to hear some speech sounds and words spoken with normal voice effort at 1 metre when child’s attention is gained. Will have difficulty hearing some beginnings and endings of words (consonant sounds) in background noise.</td>
<td>Counselling on managing spoken communication essential to ensure a child hears speech. Hearing aids. May need an FM radio hearing aid system. Assessment of visual communication needs also important.</td>
</tr>
<tr>
<td>Severe loss (71-90dBHL)</td>
<td>Able to hear the sound of a voice faintly when shouted into the better ear, but unlikely to understand what is said.</td>
<td>Counselling on managing spoken communication essential to ensure a child hears speech. Hearing aids are essential, as is a personal FM system in the classroom. Children at this end of the spectrum may not receive sufficient benefit from hearing aids and a cochlear implant may be considered. Assessment of visual communication needs also important. Speech-language therapy will assist in speech development.</td>
</tr>
<tr>
<td>Profound loss (91+ dBHL)</td>
<td>The child may hear occasional sounds such as loud noises but may not understand any speech even if shouted close to ear.</td>
<td>Counselling on managing communication. Assessment of visual communication needs also important. Child will not receive sufficient benefit from hearing aids and cochlear implant may be considered. With a cochlear implant and/or hearing aids, speech-language therapy will assist in speech and language development. In the learning environment, hearing aids or cochlear implant must be used with a personal FM system.</td>
</tr>
</tbody>
</table>
Testing babies and young children

Audiologists have special tests for babies and young children. The tests chosen will depend on the child’s age and ability to complete the test, and what needs to be known about their hearing. Babies can be tested at any age from birth.

A hearing assessment usually involves a range of tests and will include tests that measure the ‘quietest’ sound the child can hear. This is called a hearing threshold. Hearing assessments may also include tests that measure a child’s ability to understand more complex sounds such as speech.

Audiologists are used to testing babies and younger children and will want to make the child’s experience as easy as possible.

The ways hearing is tested

There are two main ways to test hearing: behavioural tests and physiological tests (see below). Both tests are usually carried out together. Results are compared to confirm the type and degree of hearing loss.

Behavioural tests may involve the use of pure tone audiometry. This is the most common hearing test and it involves the child listening to a range of tones and reacting when they are heard. Pure tone audiometry can be done by Air Conduction in which the child wears headphones to listen for test sounds moving from the headphone speaker down the ear canal through the middle ear to the cochlea in the inner ear.

Another way of testing pure tone audiometry is by Bone Conduction where a small vibrator is placed on the mastoid bone behind the ear to test the sensitivity of the cochlea to the test sounds. Sounds presented this way travel through the bones of the skull and vibrate the cochlea directly, stimulating the hearing nerve. This method bypasses the outer and middle ear.

The air and bone conduction hearing levels on the audiogram help to describe the type of hearing problem.
Behavioural tests

The audiologist watches for a change in behaviour when a child hears a sound. This can be used to test the child’s hearing with or without hearing aids. The type of behavioural test used depends on the child’s age and abilities. Results can indicate an ability to hear sounds across different sound frequencies, which helps in deciding on the best hearing aid.

There are three main behavioural tests.

1. Visual Reinforcement Audiometry (VRA). For children six months to two and a half years. In babies this test depends on them being able to sit unsupported on a parent’s knee and having good head control.

   How it works
   The child is taught to turn their head when a sound is heard. This is encouraged or reinforced by seeing a moving puppet or toy in a window box which lights up. By altering the frequency and intensity of the sounds, it is possible to find out about the child’s ability to hear sounds across a range of frequencies.

   Results
   Testing is done with insert phones so that individual ear information can be recorded, or through a loudspeaker if the infant will not wear the insert phones. These results are plotted on an audiogram.

2. Play Audiometry. Used for most children from about two and a half years to five years.

   How it works
   The child listens to sounds and is taught to make a response every time a sound is heard. The response can be almost anything that suits the child’s interest, abilities and attention, and is also quick and reliable. For example, the child may drop a marble in a bucket, put a peg in a board or put a stamp on a piece of paper.

   Results
   The child is encouraged to respond even to the very softest sounds. If the child is cooperative, the technique can be used to produce a complete audiogram of the child’s hearing. Play audiometry can also be used to test the child’s hearing when hearing aids are worn.

3. Pure tone audiometry. Used for children five years and older.

   How it works
   The child wears headphones or insert phones and listens to sounds. The child is taught to press a button or tap with a stick every time a sound is heard. This is the same way that hearing is tested for adults.
Physiological Tests

Physiological tests are especially valuable when behavioural testing is not possible or when the child’s age or abilities make behavioural testing difficult. Physiological tests help with working out which part of the ear or auditory system is causing the hearing loss. These tests don’t hurt and are not uncomfortable.

Physiological tests are less likely to be affected by the child’s abilities. They only require the child to be sitting or lying quietly while the test is done, although this can sometimes be a challenge too.

1. **Otoacoustic Emission (OAE) Testing.** This tests whether certain hair cells in the cochlea are working properly.

   **How it works**
   Certain cochlea hair cells respond to sound by producing a very soft sound of their own. This sound is called an otoacoustic emission.

   **Results**
   By measuring if this response is coming from various parts of the cochlea, it is possible to learn how these tiny hair cells are working.

2. **Evoked Potential Testing.** This measures the function of the auditory nerve and higher auditory processing centres.

   **How it works**
   The most commonly used test of this type in New Zealand is Auditory Brainstem Response audiometry or ABR. This measures the activity of various parts of the nerve pathway from the ear to the brain when a sound is made. Electrodes (small stickers) are attached to the child’s head to record electrical energy in the auditory pathway in response to the sound. The child wears insert phones and this allows recording of the auditory system’s response to specific frequencies and different intensities. This can usually be done as the child sleeps, but sometimes a light general anaesthetic is needed for older children who may be inclined to wriggle.

3. **Tests of Middle Ear Function.**

   a. **Tympanometry**
   Tympanometry is not a hearing test, but a test of how well the middle ear system is functioning and how well the eardrum can move. A small rubber tip is placed in the ear and a little air is pumped into the outer ear canal. If there is a problem in the middle ear it will usually show up on this test. For example, if there is very little movement of the eardrum, it may indicate there is fluid behind the eardrum as a result of a middle ear infection or Glue Ear.

   Tympanometry is widely used in New Zealand. Many family doctors, Plunket nurses, Vision Hearing Technicians, Māori and Pacific Island Community Health Workers, practice nurses and Ear Nurses use tympanometers.

   b. **Acoustic Reflexes**
   When a child has normal tympanograms, it may be possible to test for a muscle reflex (the “acoustic reflex”) in the middle ear. The way this reflex responds to different sounds can provide valuable clues about a child’s auditory system. Reflexes can only be reliably measured when children are quiet and still.

Regardless of the label given to your child’s hearing loss, it’s important to remember that each person’s hearing loss is configured differently and therefore is unique.
 SECTION 5
HEARING AIDS, COCHLEAR IMPLANTS, AND OTHER ASSISTIVE TECHNOLOGY
WHAT ARE HEARING AIDS?

Most children diagnosed with a permanent hearing loss are fitted with hearing aids. The term “hearing aid” includes the mould that sits inside the ear, plus the main part that for children, sits behind the ear. Ear mould + hearing aid = the complete hearing aid.

Hearing aids are mini amplifier systems that make sounds louder. They are extremely important in helping children to make the best use of what hearing they have.

Hearing aids can’t permanently fix hearing loss or return hearing to ‘normal’. What they can do is make sound signals strong enough for your child to hear them.

Hearing aids are not like glasses: it’s not just a case of wearing them to ‘hear better’. Hearing aids increase noise levels, but the brain still needs to process these sounds. Children of any age can learn to make sense of the new sounds they hear through their hearing aids if they wear them consistently and get suitable therapy or teaching support.

Your child’s hearing aids will be individually matched to their level of hearing loss. As your child grows, and as technology changes, their hearing aids will need to be adjusted or replaced.

For infants and children who have severe to profound sensorineural hearing loss (see section 4, page 35) and who would get little benefit from hearing aids, a cochlear implant may be suggested.

“If your child has not seen an adult with hearing aids, they may think they won’t need their hearing aids when they grow up. In most cases, they will always need to wear hearing aids, so you may need to explain this to them.”

“Meghan wore hearing aids from an early age. Sometimes she would scream or shout when the aids were on. I taught her to use a one-to-four scale to learn about sound levels. We used 1 for a whisper, 2 for a normal conversation, 3 when excited or angry, or with a strong emotion, and reserved 4 only for emergencies needing urgent help. For example, at the movies or when we travelled on a plane, I taught her to use 1 when the lights were out. She soon learned to control her own voice and adapt to the situation she was in.”
All hearing aids have the same parts

- **Microphone** – picks up the sound and turns it into an electrical signal
- **Amplifier** – increases the size (amplifies) of the electrical signal
- **Receiver** – converts the amplified electrical signal back into sound

Hearing aids require an ear mould. This is a clear or pale-coloured rubbery shape that sits inside the outer ear. A small tube connects the hearing aid (which sits behind the ear) to the mould. The tube carries sound from the hearing aid into the ear.

The different types of hearing aid

**Behind-the-Ear (BTE) hearing aids**

Young children are usually fitted with behind-the-ear or BTE aids – mainly because they’re easy to use, are of a manageable size and easier to repair. Young ears will be too small for larger types of aids, and small aids may not be able to be connected to assistive devices such as Frequency Modulation systems (FM systems). Other reasons these are most suitable relate to safety and problems with feedback.

For young children, behind-the-ear hearing aids can have a locked volume control to prevent children accidentally turning them up or down. You can also get a tamper-proof battery door so children can’t take the battery out and put it in their mouth.

A typical behind-the-ear hearing aid

1. Programme selector button
2. Digital volume control
3. Battery compartment and on/off switch
4. Sound inlet to microphones
5. Sound outlet to earmould via speaker and earhook
Bone conductor hearing aids

These are used when a hearing aid with an ear mould cannot be fitted. They are usually required when a child has a permanent hearing loss. The bone conductor is worn with a band that is usually placed behind the ear or on a soft band or cap. Sound is sent to the inner ear by vibrating the bones of the skull.

Bone anchored hearing aids – BAHA

These are used for the same reasons as bone conduction aids. They are usually fitted to children who have had, or may soon have, surgery for an implant in the mastoid bone behind the ear. The bone conduction aid will be attached to this implant. These aids can be fitted to a soft headband worn by children who are awaiting implant surgery.

“Louis will start school at the end of the year and that will bring a whole new challenge to his life. We are confident he will be prepared with his BAHA and will be as advantaged as any other child.”

Liz, mother of Louis

Other styles of hearing aid

- ITE – In-the-ear
- ITC – In-the-(ear) canal
- CIC – Completely-in-the-canal
- RITE – Receiver-in-the-ear

These styles are not usually provided to young children because of safety, fitting security, rapid ear growth and feedback problems.
Choosing the best type of hearing aid for your child

Your audiologist will discuss which model is best for your child. This will be based on the child’s needs and factors such as:
- size and shape of the ear
- degree of hearing loss
- the age of your child.

Ear moulds

The ear mould is the piece that sits snugly in the ear and is attached to the main (outer) part of the hearing aid. To get the same individual shape of the inside of your child’s ear a cast or impression is made. Taking an ear impression may feel a little weird, but it doesn’t hurt.

Your child will need to be relaxed, and discouraged from touching their ear during the process. It’s good to have a few items you can use to distract them. Audiologists usually have toys and books on hand if you have not brought your own. Always explain to your child what is happening.

The audiologist will begin by looking at your child’s outer ear and ear canal with a special light (an otoscope or auriscope) to make sure it is clear and healthy.

Then they will gently place a small foam or cotton ‘block’ attached to a cotton string in the ear canal, to stop the ear impression material (like soft putty) from going too deep into the ear.

Next, the impression material is carefully squeezed into the ear. This impression material becomes firm in a few minutes. It is then removed and sent to the manufacturer, who uses it to shape the ear mould. If your child needs two hearing aids, the process is repeated for the second ear.

Within a few days, the manufacturer will send the ear moulds to your audiologist and another appointment is made for your audiologist to fit them.

The ear mould should fit firmly, so that sound being directed from the hearing aid itself doesn’t ‘leak’ or cause a whistling sound, known as ‘feedback’.

Children are constantly growing so a firm fit can quickly become a loose fit. This means there will be an ongoing need to have new ear mould impressions made. In the case of a baby, new ear moulds may need to be taken as often as every one to two months during the first year following the first aid fitting, and as needed during growth spurts.

Trouble-shooting a hearing aid

- Some children and adults near a child may be able to hear feedback (whistling). If your child or others are finding the whistling disturbing, sometimes aural gel applied to the earmould can help.
- Whistling hearing aids may be caused by wax build up, middle ear fluid present, or the mould may be sitting incorrectly in the ear. See the steps for checking a hearing aid on page 48.
- If whistling is caused by cracked tubing or a growth spurt, you will need to get the tubing replaced or new ear moulds made.
- It pays to contact your audiologist as soon as there’s a problem, as ear moulds take time to be made and fitted. The turnaround time for very young children can be under one week.

FAQ: Will my child need one or two hearing aids?

If your child has a hearing loss in both ears, two hearing aids are needed. If your child has a loss in one ear, only one hearing aid may be needed. Being able to hear from both sides is important for localisation, hearing across distance, and hearing in background noise.

Limiting hearing aid use to one ear if there is a loss in both ears limits your child’s ability to hear the best that they can. It also deprives the brain of the stimulation it needs to develop properly.
FAQ: What can I do to stop feedback in my child’s hearing aids?

The best solution is often a new ear mould. While waiting for the new moulds to come back from the manufacturer you may find that using a lubricant like Auragel will help by filling in the spaces between the mould and the ear. Alternatively, a light smear of KY gel on the mould can help.

If your child has ear infections or skin problems, check with your doctor before using Auragel.

Adjusting hearing aids

Hearing loss can vary in degree and configuration, so it is important that each hearing aid is adjusted to suit the child who needs it.

Audiologists adjust hearing aids using an internationally recognised prescription procedure so that the aid is adjusted to amplify to the correct levels at different frequencies, according to the degree of hearing loss. The procedure recommends how much gain or amplification is needed over different frequencies for soft, medium and loud sounds. This is to make sure that soft speech sounds can be heard and loud sounds are not uncomfortably loud.

In younger children, the audiologist will adjust the hearing aid with the computer to match the hearing loss of the child, and by checking their reactions to sounds. Older children are more able to participate in the fitting process so they can tell the audiologist about the sound quality and loudness.

Real ear testing

The amplification of sound is measured with computers and part of this process is called ‘real ear testing’.

This involves putting a tiny silicone probe tube into the child’s ear along with the ear mould, and measuring the levels of sound from the aid in the child’s own ear canal using a miniature microphone attached to the tube. The levels measured in the ear are checked against the prescription and adjusted if needed.

How to tell if your child is benefitting from their hearing aids

The most important part of fitting hearing aids is working out how well your child is actually hearing with the aids. The aim, after all, is to help your child hear speech and other sound so they will develop listening and spoken language skills.

Audiologists and Advisors on Deaf Children (AODC) can assess aided hearing in a variety of ways, using hearing tests and speech perception tests to find out what range of sound your baby can hear and later understand.

VERY YOUNG CHILDREN: parents and family members can use checklists to see when the child reaches important hearing and listening milestones.

TODDLERS AND ECE CHILDREN who have worn their hearing aids for some time will continue to have their hearing and speech perception assessed (with aids in) and monitored by audioligists and AODCs. This is to make sure they are progressing well toward learning to hear and speak.

When your child starts ECE and primary school, their reaction to the noisy environment, as well as their ability to communicate in this noise and to understand speech over greater distances, is monitored carefully. They may need to use assistive listening devices, such as an FM system (see page 49).
Hearing aids need to be worn regularly

It is important for children to wear their hearing aids regularly. For most children this should be all day, every day except when sleeping which can cause discomfort, or in water.

Audiologists monitor children’s hearing sensitivity on a regular basis and will be looking for any changes.

Children with moderate and greater degrees of hearing loss need to hear many sounds, words and sentences many, many times to develop speech and language skills and an understanding of the world around them.

For children with milder loss, it is sometimes hard to get them to wear their hearing aids as they say they can hear, not realising what they are missing.

If hearing aids are prescribed for milder degrees of hearing loss, the hearing aids have been given to the child to provide them with a clear speech “signal” so they can develop normal speech and language, and hear well in all situations.

Getting used to hearing aids can be difficult for all the family. Parents often expect their child to magically begin responding to sounds and start communicating right from the start. But these devices just provide the pathways, and the child now needs to learn how to use them.

The wonder of hearing sound for the first time: learning to listen

For children with all types of hearing loss, the development of language through speech starts with learning to listen.

Once your baby or child understands there is value in taking notice of what they’re hearing through their hearing aids, they soon learn that different sounds mean different things. Sounds happen when people move their mouths and that means something. Or sounds happen when a telephone rings, and that means something too.

As your child learns that each sound has meaning, they will develop a ‘memory bank’ of sounds which most of us have been building up since we were born. Those who can hear have had a head start. So if your child has just begun to wear hearing aids, there will be a lot of catching up to do. That is why a hearing loss needs to be identified as soon as possible. Now that New Zealand has universal newborn hearing screening, we hope that all babies born with a hearing loss who need hearing aids will be fitted with them when they are only a few months old.

Magic ears

Some parents call hearing aids ‘magic ears’ to help their children accept them. It can be hard to encourage a child to wear their hearing aids when parents themselves are not sure about the benefits they bring. This is especially so if a child shows little or no response to sound in their early tests. It is helpful to understand that a child’s age, personality, and hearing level can all affect the way they react to their hearing aids.

Showing a positive attitude to the hearing aids will influence the way your child sees them.

There are ways to make the introduction of hearing aids easier. Ask your audiologist or AODC to show you and your child how to insert them correctly into your child’s ear. It’s fine to ask them to show you this more than once because correct insertion is very important.

Also check with the audiologist that the ear moulds are comfortable and not likely to cause feedback or whistling. If they do cause feedback, go back to the audiologist and ask to have this sorted out.
PAYING FOR HEARING AIDS

Most children's hearing aids are fitted through the public hospital system. A small number of private audiology clinics will also fit children’s hearing aids and while there is a charge for the fitting and ongoing care, the cost of the hearing aids themselves is supported by the Ministry of Health, through the Hearing Aid Funding Scheme (criteria apply). The Ministry of Health will fund up to three hearing aids within a six year period for children and young people up to the age of 16 years if the hearing aids are lost or damaged, or if the hearing loss changes.

Funding or subsidies for older children and adults are available under the Hearing Aid Funding Scheme or the Hearing Aid Subsidy Scheme: ask your AODC for more information or go to this website www.health.govt.nz/yourhealth-topics/disability-services/hearing-and-vision-services

Although the Ministry of Health pays for some loss or damage replacement (up to three times in six years), parents are encouraged to arrange their own insurance cover as well. Where parents have this insurance, Ministry of Health may pay the excess on a claim, and the lost or damaged aid is not then counted as one of the three funded in a six year period.

Looking after your child’s hearing aids

Day-to-day operating and checking is the responsibility of the family. Check the hearing aids daily. Morning is often the best time to make sure they are in working order for the day ahead. Once a routine is established it can be very straightforward.

When a child is first fitted with hearing aids they will usually get a maintenance kit. This kit should include:

- a battery tester, to check whether batteries need replacing
- an air puffer, to clear any moisture in the hearing aid tubing
- a stethoclip, so parents can listen to the hearing aid at a level that is comfortable to them
- a wax tool, to clear wax from the opening of the inner tubing of the ear mould.

“A seagull flew off with it! I had placed it on a picnic table as Dylan had been pulling it out with his sticky ‘lunch’ fingers. I was on my own and changing Dylan on the grass, the seagulls were all over the table - and no doubt mistook the hearing aid for food.”

Dylan’s family
Hearing aid batteries and repairs are provided by the Deaf Education Centres; families from Taupo northwards should contact Kelston Deaf Education Centre while van Asch Deaf Education Centre supplies families from Taupo south, including the South Island. Contact your AODC or audiologist for more information.

As children grow older, encourage them to take more responsibility for checking and maintaining their hearing aids. Soon they should be able to learn how to detect and solve problems themselves. However, until they are able to do this parents or caregivers need to do this for them.

Simple steps to check and maintain hearing aids

**Step one: do a visual check of the ear mould**

a. Is the hole (sound bore) in the ear mould clear of ear wax? A total blockage will stop the amplified sound passing into the child’s ear canal. Partial blockage may reduce the sound or result in the hearing aid feeding back (whistling). Remove any wax with a wax tool.

b. Is the ear mould clean? Wipe it with a tissue or damp cloth to remove any grime. If a behind-the-ear ear mould is dirty, remove the ear mould from the hearing aid and wash it with warm, soapy water. Take care to remove all water by drying it and also using a puffer.

c. For behind-the-ear hearing aids only: Is the tubing from the ear mould to the hearing aid in good order? If there is a ‘kink’ in it or it is twisted, this will affect the passage of sound through to the ear. If you can’t remove the twist, you may need to replace the tubing.

d. Is the tubing free of any holes or splits? This will make the hearing aid cause feedback, and stop sounds reaching the child’s inner ear. Take the ear mould to an audiologist or AODC.

e. Is the ear mould inserted in the ear properly? The only part of the ear mould that should be sitting out of the ear is the tubing. The rest should lie at the same level as the rim of the ear.

**Step two: do a visual check of the hearing aid**

a. Is the hearing aid free of any damage or cracks? Damaged hearing aids may make the hearing aid work intermittently. It will need repairing.

b. Are the switches all in place? If switches are missing these need to be replaced.

c. Are the batteries clean and the battery compartment free of dampness or rust? Corrosion on the battery or in the battery compartment will look like powder. Throw away the leaking battery and try cleaning the battery contacts carefully with a cotton bud dipped in methylated spirits. If the hearing aid still doesn’t work, get it repaired.

d. For behind-the-ear hearing aids only: are the hearing aids on the correct ear moulds? Check the ear mould is shaped like the letter ‘C’ which matches the curve of the hearing aid – if it isn’t then it may be attached the wrong way around or to the wrong hearing aid.

**Step three: do a listening check**

To perform a listening check you will need to use a stethoclip (or special ear mould tubing supplied in your maintenance kit). Place one end over the opening in the hearing aid mould and the other end in your ear. This will give you the sound which is similar to the sound your child hears through their hearing aid.

When listening through the stethoclip, speak clearly into the microphone of the attached hearing aid using a range of sounds such as: ahh, ee, orr, oo, sh, sss, mmm, and/or count out loud. Take note of the sound quality when the aid is working well. The more times you do this, the better you will become at detecting poor sound quality.

a. Can you hear sound coming out of the hearing aid? Switch the hearing aid off and on a few times, and change the battery if necessary.

b. Is the volume control moving as it should? Note that sometimes your audiologist may have turned off the function of the volume control to prevent accidental changes when your child is wearing the aids.

c. Is the quality of the sound coming from the hearing aid clear? If you hear any static or distortion or cracking sounds the hearing aid needs to be checked by a technician.
Step four: do a speech check

Another way of checking the hearing aid is working well is to carry out a quick speech check. A speech test simply means you make these speech sounds while standing behind the child, and ask them to repeat them.

If the child has an aid with directional microphones, stand beside them when testing. But don’t always use the sounds in the same order, as children can learn which sounds to expect, rather than actually listening for them.

Use the sounds: ahh, ee, orr, oo, sh, sss, mm because they cover the frequency range of speech. Ask the audiologist which of these sounds your child should be able to hear, and at what distance.

Hearing aid tips

- You can check if the battery in a hearing aid is still working, by cupping your hand over the hearing aid at any time when it is switched on. If you hear a whistling noise the battery is still okay.
- Never connect a hearing aid to a stethoclip unless it is turned off as some aids are very powerful and the decibel levels could damage your hearing. Talk with your audiologist or AODC about checking an aid for a severe or profound loss.
- Hearing aids are individually programmed for the hearing in each ear. Some moulds have tiny wording in different colours (such as in blue and red) on the inside of the tubing to help you identify which is left and which is right. Hearing aids also have different serial numbers, so you can also write down the serial number for ‘L’ and ‘R’ when you first get them. Stickers can help your child know which is which, and some parents also use a pen to mark ‘L’ and ‘R’ on the aids to help them.
- Never use your mouth to blow through the hearing aid tubing, as your breath carries moisture and germs which will get into the tubing.

“Last summer we discovered the aids are fairly resilient. Dylan drove his play motorbike into a swimming pool and both ears survived the chilly submersion!”

Dylan’s family

FM SYSTEMS
(OR FREQUENCY MODULATION SYSTEMS)

Personal FM/ Radio aids

While hearing aids and cochlear implants are very helpful, their benefit is often limited because of background noise, listener-speaker distance and reverberation. ECE centres and classrooms can be noisy places. Hearing the teacher is very important. Remember that hearing aids amplify all sounds, not only those that we want to hear. This is where personal FM devices are extremely useful.

How a personal FM system works

The person speaking to the child wears a microphone that is an FM transmitter. The child wears an FM receiver attached to their hearing aid or speech processor. The FM transmitter sends the speaker or teacher’s voice signal via radio transmission to the child’s FM receiver. The signal is then amplified in the hearing aid or speech processor.

The FM radio waves do not pick up other sounds as they are transmitted to the receiver, so the effect of using an FM microphone at a distance from the child is the same as if the talker was speaking close to the child. Some FM systems can be used without connection to hearing aids or speech processors, such as those used by children with auditory processing disorder.

Where to use an FM system

FM systems are particularly useful in ECE centres or schools, when there is a lot of background noise. An FM system can also be used in many other situations, for example, you can use it with young children at home or in the car, older children can use it when connected to the television, or they can worn by a lecturer at tertiary level.

FM systems provide huge benefits if used properly. Make sure your child’s teachers understand how to get the most out of their FM system. Your AODC can help with this – and every time your child has a new teacher, you’ll need to make sure they understand the system too.
Sound field or classroom amplification systems

How they work
The sound field system is made up of a microphone and transmitter worn by the teacher. Instead of a child wearing a personal receiver, one or several loud speakers are usually located in the classroom. The sound field system delivers the teacher's voice to an amplifier/receiver via infra red or FM signal carrier, and then via the speakers into the room for all the class to hear. The amplified sound is distributed evenly around the room. The set up is similar to a public address system. An advantage of the sound field system over a personal FM system is that a child does not have to actively co-operate by wearing a personal FM receiver to benefit from the increased sound signal of the teacher's voice.

Benefits
These systems provide benefit to children wearing personal hearing aids and cochlear implants by providing an improved signal (teacher voice) to classroom noise ratio. However, the benefit may not be as great as that provided with the use of a personal FM system which delivers the teacher's voice directly to the child's hearing aid or cochlear implant speech processor. Soundfield systems are often also used for children who have hearing problems but who do not wear a personal hearing aid, such as some children with slight, mild, or unilateral hearing losses, and children with listening or auditory processing disorders.

Funding
Soundfield systems are funded by the Ministry of Education for specific hearing impaired children and students in schools. The Ministry of Education’s Assistive Technology service will consider funding personal FM or sound-field systems for students who are identified as having special learning needs (and therefore receive additional support for learning from their school or Ministry of Education special education services). The allocation of a personal FM system or sound field system must be considered as a part of a support package for a student with hearing loss (including auditory processing disorder) and not as the sole intervention strategy.

The Ministry of Health funds FM systems for ECE children and students in full time tertiary education under the age of 21. There may also be funding available for young people aged 16 years and over who meet the Ministry of Health eligibility criteria but who are not in tertiary education.

Your AODC will be able to assist with funding applications.

For more information see:
www.hearingresearch.org/ross/children_and_hearing_loss/classroom_sound_field_systems.php
www.nfd.org.nz/87/Sound-Fields
(NB: the second website mentions one product range of systems. There are other suitable products available in New Zealand and these can be discussed with your AODC.)
Unlike hearing aids, which simply amplify sound, a cochlear implant (CI) bypasses the part of the ear that is not working and electrically stimulates the hearing nerve directly. A cochlear implant may be suggested for children with severe to profound hearing loss who do not get much benefit from hearing aids.

The cochlear implant is surgically implanted in the bone behind the ear and can provide useful hearing sensations by sending electrical signals to the nerve endings in the inner ear, called the cochlea.

Cochlear implants have the same aim as hearing aids – to enable a child to hear as much of the range of speech sounds as possible so they may develop useful listening, speech and spoken language skills.

There are some major advantages of cochlear implants that families will want to consider.

• Many children understand speech through hearing alone.
• Most children demonstrate an improved ability to communicate verbally, especially when combining lip reading with hearing.
• Many children develop advanced speech skills.
• Children have a greater awareness of everyday sounds in the environment, eg people calling, doorbell and telephone ringing, traffic noise.
FAQ: What is the difference between a hearing aid and a cochlear implant?

Hearing aids fit in the ear and make sounds louder so it’s easier to hear.

A cochlear implant (CI) bypasses the damaged inner ear or cochlea and electrically stimulates the auditory nerve directly to produce sounds that the person then needs to learn to recognise. A CI has two parts – one part is surgically implanted in the skull, and a speech processor is worn on the ear like a behind-the-ear hearing aid.

A CI is for someone with severe or profound hearing loss, or sometimes with ANSD (Auditory Neuropathy Spectrum Disorder).
All CI systems consist of a surgically implanted device, a cable and transmitting coil, and an externally worn speech processor.

- Sound is received by the microphone at the top of the speech processor.
- Sound is analysed and digitised into coded signals by the unique internal microchip.
- The transmitter sends the code across the skin to the internal implant.
- The code is turned into electronic signals and sent into the electrode array.
- The electrode array stimulates the hearing nerve fibres in the cochlea which creates a hearing sensation.

Cochlear implant services

The Ministry of Health’s Disability Support Services funds cochlear implants for eligible children. This covers the cost of travel to hospital for surgery, and for a child to attend audiology assessment, switch-on and follow-up appointments at the relevant CI programmes based in either Auckland or Christchurch. Strict travel criteria apply.

Programming

The switch on and programming or ‘MAPping’ of the device happens two to three weeks after surgery. Cochlear implant services will be needed for the rest of the child’s life. MAPping or changes to the MAP will need to be made regularly for the first two years, and then yearly. Extra appointments may be needed.

Habilitation

Parents and children need to be committed to intensive therapy (habilitation) to help their child adjust to the new sound being provided via a cochlear implant. An auditory (listening) learning programme is the key focus. For some children visual communication such as NZSL and/or speech reading is also used.

The Ministry of Education funds habilitation services through the northern and southern cochlear implant programmes based in Auckland and Christchurch.

Wearing the cochlear implant

It is important for the child to wear the external part of the cochlear implant all day every day except when sleeping and in or near water. Eventually the implant will become so much a part of their life that your child will not want to be without it. Most children who have a cochlear implant can remove the external part and then swim freely. If your child has a cochlear implant and you have any concerns about them swimming, talk to your cochlear implant centre.

Looking after a cochlear implant

It is important your child hears as well as possible through their cochlear implant at all times. And, like a hearing aid, wearing a cochlear implant that is not working properly can be worse than not wearing one at all.

In New Zealand, maintenance and repairs of a child’s cochlear implant and supply of batteries is provided by your cochlear implant centre. However, day-to-day operating and checking is the family’s responsibility. Once a routine is established it can be very straightforward.

When your child is initially fitted, you will be taught how to use and maintain the implant. As your child grows older and more capable, encourage them to take on more responsibility for checking and maintaining it. Soon they should be able to learn how to detect and solve problems themselves. However, until they are able to do this, they will rely on you.

Cochlear implants should be checked daily. Morning is often the best time. Instructions for troubleshooting each processor will be given by the cochlear implant centre.

Insurance

Parents must arrange insurance cover for their child’s device and equipment as issued to them. Replacement of a speech processor wilfully damaged, lost, or stolen is the responsibility of the family. The replacement cost of a speech processor is around $10,000.
OTHER ASSISTIVE TECHNOLOGY

Communication technology is rapidly changing. The following are examples of devices that can assist with hearing in everyday life.

For up-to-date products go to: www.deafquip.co.nz and other suppliers, such as hearing aid companies.

- Shake n Wake Alarm Clock with Bedshaker
- Telephone Ringer/Flashing Light Signaller
- Vibrating Smoke Alarm
- Amplified Telephone
- Vibrating Baby Monitor
Many kinds of everyday equipment can be adapted to help people with a hearing loss. Here are some examples.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm clocks</td>
<td>Wakes person using a strobe light or through a vibrating unit under the pillow.</td>
</tr>
<tr>
<td>Door/phone bell</td>
<td>A buzzer on the door causes a strobe light to flash inside. In some houses this is attached to wiring to indicate whether someone is at the door or the phone is ringing.</td>
</tr>
<tr>
<td>DVD subtitles</td>
<td>Movies usually include a language track with subtitles for deaf and hearing impaired viewers.</td>
</tr>
<tr>
<td>Email and instant messaging (eg with skype, facebook)</td>
<td>Allows written messages to be sent electronically.</td>
</tr>
<tr>
<td>Hearing aid/cochlear implant – compatible mobile phone</td>
<td>Mobile telephones that do not interfere with hearing aids or cochlear implants.</td>
</tr>
<tr>
<td>Cellphone texting</td>
<td>Short written messages.</td>
</tr>
<tr>
<td>Modified telephone</td>
<td>Volume control to increase the sound coming through the telephone. Some are able to improve sound quality through using the telecoil or ‘t’ switch on the hearing aid.</td>
</tr>
<tr>
<td>Smoke alarms</td>
<td>Same way as a normal smoke alarm but can trigger strobe light or cause a separate pager to vibrate.</td>
</tr>
<tr>
<td>Teletext television</td>
<td>Shows subtitles on many television programmes and enables the deaf person to view news and weather.</td>
</tr>
<tr>
<td>TTYs (teletypewriters)</td>
<td>Like a small typewriter with a screen or printer to display a message coming from another TTY.</td>
</tr>
<tr>
<td>Television/radio</td>
<td>Several systems are available to improve the TV or radio signal, either by direct connection to the hearing aid or FM system or via a separate headset.</td>
</tr>
</tbody>
</table>
Funding for assistive equipment
If you are a member of a parents’ group that belongs to the New Zealand Federation for Deaf Children Inc. you may be able to apply for a partial refund on assistive technology you buy for your child.
Funding may be available through the Ministry of Health for essential equipment such as a vibrating or visual alarm clock for a young person.

OTHER SERVICES

NZ Relay Service
TRS stands for Telecommunications Relay Service. NZ Relay Service is the name of the service that enables deaf and hearing impaired people to make telephone calls to normally hearing individuals using an operator who types the conversation so the Deaf person can read the words on their TTY display.
See www.nzrelay.co.nz
COMMUNICATION TIPS WITH AIDS

Communication when a child is using aids (with or without signing) relies on the child receiving a clear sound message or signal whenever possible. Here are some ways to help your child.

1. Make sure your child can see and hear you clearly
   - **Show your face.** When you’re in the same room, make sure your child can see faces and mouths so they get extra clues to what is being said. When reading aloud, facial expressions help to tell a story, so make sure the book doesn’t cover your face.
   - **Lighting.** Too much glare or insufficient lighting will make it difficult for a child to see your face and/or hands clearly if you are using NZSL to support listening.
   - **Speak clearly but naturally.** Exaggerating or shouting can make it more difficult for the child to understand speech. Shouting may overload the hearing aids, as a louder voice just gets distorted.
   - **Don’t move about.** This makes it difficult to lip read.

2. Reduce background noise when talking with your child
   - **Turn down noisy appliances.** Decrease the level of background noise such as the television or radio. If it may be heard at the same level as speech, it will be hard for a child to decide which noise they should be listening to.
   - **Move where it’s quiet.** Move away from noises such as other children or noisy motors such as fans, air conditioners, loud speakers, and traffic.
   - **Keep close.** Stay less than a metre away. However, use some judgment on this as standing too close to a person may not be helpful in some situations. One metre away from a child is often called optimum distance.

3. Use simple spoken language
   - Parents naturally speak to babies in a special way. They simplify the way they describe things and often repeat back the sounds the baby has made. This adaptation of normal language is termed “motherese”. For guidance on the natural development process of speech contact a Speech-Language Therapist, AODC or Resource Teacher: Deaf.

4. Check for understanding
   - Check your child has understood what you have said by watching their response or by asking clarifying questions. If they have not understood, try saying the same thing again in a simpler way.

- **Watch surfaces.** Be aware large rooms with hard surfaces that don’t have carpet or curtains etc. Sound bounces off hard surfaces, giving a more distorted signal and making it harder for a child to hear sounds clearly. A room like this is described as being reverberant.
- **FM system.** Another way to reduce the impact of background noise is use an FM system. Ask the audiologist, AODC or Resource Teacher: Deaf about this.
SECTION 6
COMMUNICATING WITH YOUR BABY OR TODDLER
Every arm or leg wave, every coo, babble or smile – these are your baby’s ways of communicating with you. It is important that you always try to respond – by talking, with touch, eye contact, gestures, and facial expressions.

This early communication is how your baby starts to learn about the world and their place in it. Through communication we become part of society.

When your baby has a hearing loss, they may not respond so much at first. This can be discouraging, but it is important to keep trying as your baby will be taking lots in and this is extremely valuable to their development.

**FAQ: I’ve been told my baby is ‘deaf’ – does that mean my baby can’t hear any sounds?**

It’s unlikely your baby will not be able to hear anything at all. The word ‘deaf’ refers to all types and levels of hearing loss. Your Audiologist or Advisor on Deaf Children (AODC) can explain the results of your baby’s hearing tests and tell you what sounds your baby can hear and which ones may be difficult to hear. Your Audiologist may even be able to arrange a ‘simulation’ in the audiology clinic so you can hear some sounds at the same level as your baby would hear them.

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**LANGUAGE**

A child’s brain is programmed to learn the foundations of language in their first six years. The first three years are the most critical.

Language is not the same as speech. Language is made of the words (or signs) we use in our heads – we think in “language”. We can only communicate in spoken language if we can think in words and their associated sounds.

Without being able to hear people speaking it is very difficult to learn the structure of a spoken language and therefore later also learn to read. Deaf children need to learn to understand written language, and pathways to doing this can vary. This means you will need to explore and learn about the best pathway for your child to learn language structures.

The earlier you start communicating with your child – any method of communication – the better. This may be using speech (with the help of hearing aids or a cochlear implant), visual means such as sign language, or both.
Baby sign language

Whether hearing or deaf, babies can be taught basic signing so they can communicate before they would normally start to speak. Several books and DVDs are available through shops and resource centres. Deaf Aotearoa New Zealand (DANZ) supports a DVD, ‘Teach Your Baby or Toddler NZSL’, which teaches parents an easy way to communicate with babies and toddlers. This is funded by Ministry of Education and Victoria University. It is available through the DANZ website and through AODCs.

Hearing with aids or a cochlear implant

The aim of hearing aids and cochlear implants is to make speech audible and comfortable. For most babies, early intervention should be in place by six months and will enable them to develop speech and language normally.

You can make this easier for your baby by turning off the TV and radio and putting their aids on as much as possible. Talk to your child in the same way you would to any child.

Even if your baby with a hearing aid can’t hear all the sounds of speech, always use it. Babies usually adapt to listening through a hearing aid very quickly.

Ideas to help your baby develop communication skills

- Try to stay within a metre of your baby as their focal length at this age is about the distance from their chin to their elbow.
- Capture their attention first. Make sure they are looking, and keep eye contact with them. Make sure they can see your face, and hands if using sign language or other visual cues. If they are already looking at something, give them time before asking for their attention.
- Play games. For babies, games such as “Peek-a-boo!” are always popular. Once a baby understands the game, they’ll respond.
- Take turns. Watch them and when they finish, take a turn. Then pause again to allow your child to take a turn.
- Use gestures, point to pictures, or act out a story.
- Make communication fun. If the going gets tough, take a break and try again later.
- Keep their interest by pulling faces to show happiness, concern, surprise, sadness and excitement. If speaking, vary your pitch to keep their attention – it helps if you bring their hand to your throat and allow them to feel your voice. If they look away, a wave or gentle nudge can draw them back into your game.
- Hold your baby about 25 cms away from you. Now, stick out your tongue. Did they try to copy you? Try different mouth movements.
- Follow your child’s eyes to see what interests them, and respond immediately.
- Repetition is a strong key to learning. Repeat the same things over and over. Use objects, pictures or hand gestures to show what is meant.

“On Christmas day 2011, Emily gave me a gift that will never be forgotten. It will never break, wear out, lose its value or be lost in time. My baby girl, at eight months old, signed ‘mummy’.”

Corina, mother of baby Emily
Communicating with your toddler

- Talk to your toddler about the things around them, and relate what you say to them. For example: “That boy has red hair, you have black hair, and I have brown hair.”
- Start a scrapbook about favourite people, places or activities. Talk about the contents and your child’s associated experiences. Add photos, pictures, tickets, labels, anything!
- Sign language users have a physical language they can play with – try signing on paper, or on your child’s arm or their tummy. If you don’t know some signs, don’t panic. Use gestures instead as communication is the important thing.
- Fingerspell – young children can understand fingerspelling from an early age. Give it a try!

Tips for talking

- Talk to your child when you’re playing together.
- Have fun with nursery rhymes and songs, especially those with actions.
- If your child has a hearing aid, encourage them to wear it and listen to different sounds, especially those which are close. This will help listening skills.
- Gain your child’s attention when you want to talk, and make sure that they can see you clearly. Try to make sure there is light on your face and that your faces are on the same level.
- Listen carefully and give your child time to communicate. Take turns.
- Always respond in some way when they say something.
- Limit TV time. Try to watch TV together so you can talk about what happens.
- Keep background noise (for example radios and music) to a minimum.
- When you are talking to your baby stop and give them time to respond.
- Try talking about what you’re doing throughout the day – when you’re bathing or feeding your baby or changing their nappy.

Ideas to help develop language

- Let your child help make a shopping list. Communicate about what needs to be bought and why.
- Let them see captions on television programmes, or watch captioned movies. Many DVDs have a caption function you can turn on – it’s never too early to get children used to seeing captions.
- Use pictures in magazines, recipe books, TV guides, and books to support your child to make choices of activities, foods, toys, and other interests.
- If you eat out, bring home picture menus to share with your child. They can order for themselves next time, or young children can point at pictures to request what they want.
Ideas to help develop early reading skills

Reading with your child is another fun way to boost their talking. Talking and listening to young children helps to promote both social and reading skills. Children love this one-on-one attention from their parent or other close adult. The following ideas apply to any young child.

**How to read**

Start with waterproof card or lift-the-flap books. Black and white pictures are especially good for young babies. Communicate about the title and pictures first, and then go to the written words. Don’t be limited by the words, expand on the book’s ideas.

**Follow their lead**

Let your child guide you through the story if they want to. Young children can turn the pages while the pictures are briefly described. If they race through the pages, let them. Repeat the story if they want it.

**Connect with the book**

Draw on similarities or differences within the book, which the child can relate to through their own experiences in the real world.

**Be dramatic**

Play with the words. Exaggerate to show the different characters. Act out the story – you can even use props such as soft toys.

**Teach good reading habits**

Show good reading habits every day. If possible, try setting a target of reading for 15 minutes daily including weekends. Bedtime is often a good time to read with children, and a good way to settle them after a busy day.

**Encourage a love of books**

Swap books with other parents or join the local library and visit it regularly. Choose books that can be enjoyed by both the parent and the child. As they get older, encourage them to choose their own books.

**Be a role model**

Let your child see that reading is part of a parent’s daily life as well.

**Use every opportunity**

Read words in the environment around you: shop names, billboards and street signs are all reading opportunities. Engage your child in everyday news on TV and in newspapers, and talk with them about items of interest.

**Early intervention**

Early intervention is the name given to education programmes designed for children who need extra help with their early development. A number of organisations provide early intervention services (funded by Ministry of Education) for children from birth to school age. These include Ministry of Education, Northern Cochlear Implant Programme, Southern Cochlear Implant Programme, and the Hearing House.

The earlier a child receives services to address the effects of hearing loss, the more time there is to influence and develop their learning.

Early intervention staff can include:

- Speech-Language Therapists (SLTs)
- Early Intervention (EI) teachers
- Psychologists
- Auditory verbal therapists
- Cochlear implant habilitationists
- Advisors on Deaf Children (AODC)
- Resource Teachers: Deaf (RTD)
- Resource Teacher: Vision (RTV)
- Family counsellors
- Kaitakawaenga (Māori liaison advisors)
- Education Support Workers.

Early intervention teams work with families/whānau, educators, and specialists from other agencies to strengthen and extend children’s educational learning, and to ensure they have access to the early childhood curriculum, Te Whāriki.
Songs and rhymes

Young children love songs and rhymes, and children with a hearing loss are no different. Here are the words and actions to Row, Row, Row Your Boat.

Sit opposite your child and hold their hands, or put your baby on your lap facing you ‘Row’ backwards and forwards. Remember to squeak, scream, and roar when you see the mouse, crocodile or lion!

Row, row, row your boat
Gently down the stream
Merrily, merrily, merrily, merrily
Life is but a dream
Row, row, row your boat
Gently up the creek
If you see a little mouse
Don’t forget to squeak!
Row, row, row your boat
Gently down the stream
If you see a crocodile
Don’t forget to scream!
Row, row, row your boat
Gently to the shore
If you see a lion
Don’t forget to roar!

For an online music soundtrack of many children’s songs go to:
www.wordsforlife.org.uk/songs
DEVELOPING LANGUAGE

There are several approaches to developing language in children with hearing loss.

**Auditory-Verbal Therapy (AVT)**

Auditory-verbal therapy is a method for teaching deaf children to listen and speak using their residual hearing in addition to the constant use of amplification devices such as hearing aids, Frequency Modulation (FM) devices, and cochlear implants. Auditory-verbal therapy emphasises speech and listening.

**Auditory-Oral**

This speaking-listening approach, also known as Oral-Aural, combines lip reading with listening skills to develop speech and language.

**Bi-lingual/Bi-cultural**

This focuses on education through two languages, New Zealand Sign Language (NZSL) and English and two cultures, hearing culture and Deaf culture.

English is taught as a second language via reading or writing, or through sign language systems representing English.

**Total Communication (TC)**

Programmes supporting a total communication philosophy focus on a wide range of methods including speech, lip reading, listening, NZSL and fingerspelling. These may be used alone or in combination. Overseas books frequently refer to Total Communication, but it’s not often called this in New Zealand because it is associated with Signed English. However, the principles of TC are often in place in our education system.

There is very little research that any one approach is more effective than another for every single child. Some research suggests that having more than one approach can be very effective, and is strongly recommended. Further research is ongoing, however and there is as yet no conclusive evidence for or against using one or more than one approach. Talk to your Advisor on Deaf Children (AODC) about which approach or combination of approaches may best suit your family, and be guided by your child.
GOING TO EARLY CHILDHOOD EDUCATION AND SCHOOL

In New Zealand, there are several different education options for children with a hearing loss. Each has particular strengths and students often move as their educational needs change, or as they grow older. The options available will vary in different parts of the country. Ask your AODC about what is available where you live.

Early Childhood Education

Mainstream

Your child can go to their local kindergarten or early childhood education centre (ECE). They may receive professional services from an AODC, and/or a Resource Teacher: Deaf, or an Educational Support Worker. These professionals will work with your child and their mainstream teacher to meet your child's individual needs. Assessments of your child's development are made so effective learning programmes can be planned for them.

Specialist programmes

There are a small number of specialist early intervention programmes available.

- The Kelston Deaf Education Centre ECE in Auckland (see below). KDEC ECE uses NZSL and spoken language.
- The Hearing House, in Auckland. This is an independent ECE run by a charitable trust providing Auditory-Verbal Therapy. Programmes are based on the early childhood curriculum, Te Whāriki. The priority is to develop a child's communication skills and this is achieved through educational programmes that are language-rich. The Hearing House uses only spoken language.
- van Asch Deaf Education Early Intervention Centre in Christchurch.

Primary and secondary school

Your child may go to their local state or independent school and be taught in a regular classroom. They may be supported by an AODC, Resource Teacher: Deaf, a Teacher Aide/Communicator or other professional.

Resource Class/Deaf Unit

Some regular (mainstream) schools have a Deaf Unit, sometimes referred to as a satellite or resource class. Students are in small classes with a Resource Teacher: Deaf. They may spend part of the day in a mainstream class. Students may mix socially with hearing children and be exposed to the social norms and values of both Deaf and hearing communities. There are Deaf Units in schools in Auckland, Palmerston North, Wellington and Christchurch.

Deaf Education Centres

There are two government-funded Deaf Education Centres in New Zealand. The van Asch Deaf Education Centre in Christchurch opened in 1880 and was the first state school for the deaf in the world. In Auckland, Kelston Deaf Education Centre opened in 1956.

These are schools for deaf students only. They follow the same National Curriculum as all schools and programmes are taught by Resource Teachers: Deaf.

The Deaf Education Centres also have other specialist staff, such as Audiologists, Speech-Language Therapists and NZSL tutors. Children living too far away to attend daily can board at the centres once they reach intermediate school age.

For more details about the Deaf Education Centres and The Hearing House see section 8.

FAQ: What are the education options for my child?

Most children with a hearing loss go to their local early childhood centre or school and receive extra support where and when it’s needed.
## SUMMARY OF APPROACHES TO LANGUAGE DEVELOPMENT

<table>
<thead>
<tr>
<th>Approaches</th>
<th>Receptive Language (How a child understands)</th>
<th>Expressive Language (How a child expresses themselves)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDITORY-ORAL</td>
<td>Child listens and looks.</td>
<td>Child talks.</td>
</tr>
<tr>
<td></td>
<td>Child uses hearing aids or cochlear implants. Natural lip reading and gestures are used.</td>
<td></td>
</tr>
<tr>
<td>AUDITORY-VERBAL</td>
<td>Child listens and looks. Emphasis is on listening.</td>
<td>Child talks.</td>
</tr>
<tr>
<td></td>
<td>Child uses hearing aids and/or a cochlear implant to develop natural spoken language through listening. Parents are taught to integrate auditory-verbal targets into daily routines and experiences.</td>
<td></td>
</tr>
<tr>
<td>BI-LINGUAL / BI-CULTURAL</td>
<td>Child watches signs, fingerspelling, facial expression and body language. Often the child will lip-read also. Child listens and looks.</td>
<td>Child uses NZSL. May also talk.</td>
</tr>
<tr>
<td></td>
<td>Child may or may not use hearing aids or a cochlear implant. The child is immersed in NZSL as their first language at home and school. This is a complete language, where sentence structures are different to written and spoken English. Spoken and written English is taught as a second language.</td>
<td></td>
</tr>
<tr>
<td>SIGN-SUPPORTED ENGLISH</td>
<td>Child listens, watches and lip-reads signs and fingerspelling presented in English word order.</td>
<td>Child uses the signs and fingerspelling presented in English word order. Usually uses spoken English at the same time.</td>
</tr>
<tr>
<td></td>
<td>Child may use hearing aids or a cochlear implant. Signs and fingerspelling are used to match the same words in written or spoken English.</td>
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</tbody>
</table>

This combination of approaches may also be referred to as total communication.
The professionals supporting your child will work with you to develop a plan for your child’s early childhood or school education. The plan is designed to help your child achieve their learning goals. It’s really important to understand the plan and how it will support your child’s education. There are a number of plans that may be used to identify your child’s needs for specialists, teachers, strategies and/or extra resources in education.

**Plans usually used for children**

- Individual Development Plan (IDP)
- Family Service Plan (FSP)
- Individual Education Plan (IEP)

When your child is around three, it is time to start thinking about the most suitable kindergarten, ECE or school. Around six months before starting, your AODC will usually set up a meeting between you and the pre-school, kindergarten or school’s special needs co-ordinator or supervising teacher. This is to talk about and record the areas where your child is most likely to need support to learn. This meeting usually takes about an hour.

It’s not only children with a hearing loss who have these plans. They’re used for any students in schools and early childhood centres with special education needs. Your child is unlikely to be the only one at their ECE or school with an IDP or IEP.

Teaching and learning for all children takes place within the New Zealand Curriculum /Te Marautanga o Aotearoa.
THE INDIVIDUAL EDUCATION PLAN

An IEP is a plan that shows how the school and class programme will be adapted to fit the needs of your child. It uses a process that brings together the people who know your child and their needs, to plan for their learning goals and how they can be achieved. The IEP is developed through meetings of these people and the decisions made are recorded in a document called the IEP. The IEP is monitored, reviewed and updated regularly to make sure the plan’s goals, strategies, and supports are working well.

Through guidelines called Collaboration for Success: Individual Education Plans, special education staff from the Ministry of Education supports schools, families, and anyone involved in supporting children with special needs to plan and monitor their education.

Before and during the IEP planning meetings, school staff usually record information about your child that will help with developing their learning programme. In an IEP meeting, the planning group (this includes you) shares information and agrees on goals for your child. The planning group identifies the resources, assistance, monitoring and evaluation needed for your child to meet those goals. This is all recorded in the written IEP, and everyone in the group receives a copy. The plan is usually reviewed at least twice a year.

Planning meetings focus on what your child can do. However, it’s also necessary for teachers to focus on the areas where your child needs help so they can provide the best support.

The IEP meeting

Setting up the meeting

One person organises and facilitates the meeting. This is usually, but not always the AODC or Resource Teacher: Deaf (RTD). Usually your AODC or your child’s school will contact you with a suggested date and time for a planning meeting. It may take place in your home or at the school. You should be comfortable with the time and place. You should be consulted about which educational professionals will attend.
You may bring a partner, whānau, other family members or friends to support you. Your child’s AODC will usually be there to support you too. An interpreter should be available if NZSL is to be used. When your child is old enough, they will be invited to attend also.

**At the start of the meeting**
- Anyone you haven’t met before should explain their role.
- The agenda and the closing time (they usually last 30 to 60 minutes) is agreed.
- The facilitator may ask you if there are particular things you’d like to discuss.

**During the meeting**
The meeting is likely to include time for a relaxed discussion about your child, family and school. The agenda usually includes:
- an evaluation of the previous plan
- a review of the long term aims
- identification of key focus areas
- time to share information about present skills (what your child can do now)
- identification of current needs (what they need to learn next)
- setting of new goals.

This usually leads to an educational programme discussion about learning objectives based on the goals and how progress will be assessed (the results of the programme). This includes:
- identifying who will provide the programme and who will evaluate progress
- identifying resources required, for example, what equipment is needed.

Before the meeting ends, a date should be set for the next meeting.

Later, a copy of the plan will be sent to everyone who attended the meeting. This will record the decisions that were made. If you have any concerns about this process, discuss these with your AODC or teacher.

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**This is your meeting – you are your child’s manager and know your child best**
- Before the meeting, make a list of what you want to talk about.
- During the meeting, make sure everything you’ve noted is covered.
- Never feel worried about asking questions if you don’t fully understand something.
- Don’t be afraid to ask to make sure you’re clear about any new terms and acronyms.
- For important decisions, take your time. Don’t be rushed.
- Make sure the goals everyone agrees on are goals that are important to you too.
- Before you leave, make sure you clearly understand what has been agreed, such as what you have to do, what others have to do, what equipment is needed, and who is involved. Confirm the date, time and place of the next meeting.

For more information about IEPs go to [http://seonline.tki.org.nz/IEP](http://seonline.tki.org.nz/IEP)
Section 7: Language Development and Education Options

Extra Funding and Support for My Child’s Education

Funding and support is available through several government departments.

The Ministry of Education

The Ongoing Resourcing Scheme (ORS)
ORS provides funds for individual children with a range of special education needs (not just for those with a hearing loss) who require extra support at school to participate in the New Zealand Curriculum. The amount of funding is based on the criteria met by the children – they must be deemed to have high or very high needs. Not all deaf or hearing-impaired children qualify for ORS funding.

A child who receives ORS funding may have specialist intervention and/or other resources that may include:
- paraprofessionals such as a teachers’ aide
- specialist professional and therapy time
- additional teaching time
- funding for small items that may include equipment the child needs for access to the school curriculum.

Applying for ORS
Usually your AODC will process your child’s application for ORS funding. The AODC responds to questions relating to the learning needs of the students through an application process which is then sent to a Ministry of Education panel (known as “Verifiers”) to consider. These are experienced special educators who decide which particular students meet the criteria for funding.

When the child’s application has been processed, the funding either goes directly to the school or to a “fund holder” that distributes funding for children in several schools. In many cases, the Ministry of Education acts as the fund holder. The amount of support a child receives is based on the needs identified within their current Individual Education Plan.

Special Education Grant (SEG)
The SEG is what schools get to help students with special education needs who do not receive ORS support. It is intended to cover extra teachers’ aide hours, to adapt programmes or the learning environment, or provide extra equipment or curriculum material. If required, this grant may be used to employ AODCs and Resource Teachers: Deaf. The school principal sets the priorities for student needs and decides how this fund will be used within their school.
The following table lists government funding sources you and/or your child may be eligible for. Use this as a guide and contact the appropriate departments for specific advice.

### Funding sources and access

<table>
<thead>
<tr>
<th>Allowance</th>
<th>Who pays for this?</th>
<th>Where can I get more information?</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carer Support Subsidy</td>
<td>Ministry of Health</td>
<td>To find out more about claiming Carer Support, download a copy of the pamphlet How to Claim Carer Support or see a copy of the Care Support Claim form. Your local Needs Assessment and Service Coordinator (NASC) can tell you more.</td>
<td>If you are a full-time, unpaid carer for a disabled person, you can apply for Carer Support. Carer Support provides reimbursement of some of the costs of using a support person to care and support the disabled person. This means you can have a break and take some time out for yourself. The number of hours or days that Carer Support is funded for depends on your needs and those of the person you care for.</td>
</tr>
<tr>
<td>Child Disability Allowance</td>
<td>Work and Income NZ (WINZ)</td>
<td>Freephone: 0800 559 009 Deaf Link freefax 0800 621 621 <a href="http://www.workandincome.govt.nz">www.workandincome.govt.nz</a> Search: Child Disability Allowance</td>
<td>This is a weekly non-taxable payment made directly to you if you are the parent or guardian of a child who lives at home and requires constant care and attention, beyond the care that would be required for any child. This is not means tested.</td>
</tr>
<tr>
<td>Childcare and OSCAR subsidies</td>
<td>Work and Income NZ (WINZ)</td>
<td>Freephone: 0800 559 009 Deaf Link freefax 0800 621 621 <a href="http://www.workandincome.govt.nz">www.workandincome.govt.nz</a> Search: Childcare and OSCAR subsidies</td>
<td>The Childcare Subsidy gives financial help to low-income families with dependent children under the age of five to receive child care services. For example, you may decide it is beneficial for your deaf child to attend a childcare centre. Once your child is at school, the OSCAR Subsidy helps pay for before and after school programmes and school holiday programmes for children aged five to 13.</td>
</tr>
<tr>
<td>Disability Allowance</td>
<td>Work and Income NZ (WINZ)</td>
<td>Freephone: 0800 559 009 Deaf Link freefax 0800 621 621 <a href="http://www.workandincome.govt.nz">www.workandincome.govt.nz</a> Search: Disability Allowance</td>
<td>The weekly Disability Allowance is available to hearing impaired or deaf adults over 16 years of age to help pay for ongoing expenses such as hearing aid batteries. The actual amount depends on the costs in relation to the disability. This allowance is means tested.</td>
</tr>
<tr>
<td>Allowance</td>
<td>Who pays for this?</td>
<td>Details</td>
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<tr>
<td>Invalids Benefit</td>
<td>Work and Income NZ (WINZ) Freephone: 0800 559 009 Deaf Link freefax 0800 621 621 <a href="http://www.workandincome.govt.nz">www.workandincome.govt.nz</a></td>
<td>If a person aged 16 and over has difficulty finding work due to hearing loss, they may be able to claim an Invalids Benefit. Young people can qualify for an Invalids Benefit even if they attend school.</td>
<td></td>
</tr>
<tr>
<td>Training Incentive Allowance</td>
<td>Work and Income NZ (WINZ) Freephone: 0800 559 009 Deaf Link freefax 0800 621 621 <a href="http://www.workandincome.govt.nz">www.workandincome.govt.nz</a> Search: Training Incentive Allowance</td>
<td>A deaf person on an Invalid's Benefit may be able to claim a Training Incentive Allowance in order to help them get a job. The allowance can be used to buy equipment, such as a computer, or to pay an NZSL interpreter or a note taker, or for tutoring to enable them to complete a course.</td>
<td></td>
</tr>
<tr>
<td>Travel Assistance</td>
<td>Ministry of Health Freephone: 0800 281 222 (then press ‘2’) Fax 03 474 8580 <a href="http://www.moh.govt.nz">www.moh.govt.nz</a> Search: Travel Assistance</td>
<td>If you need to travel long distances – or frequently – to see a specialist, then you may be eligible for help with expenses under the National Travel Assistance Scheme. These expenses may include travel, accommodation and support person costs. Ask your hospital specialist about becoming registered for travel assistance support. Your child also needs to have a Community Services Card.</td>
<td></td>
</tr>
<tr>
<td>FM systems</td>
<td>Ministry of Education See your AODC for information.</td>
<td>See section 5, page 49: ‘Funding for personal FM systems’</td>
<td></td>
</tr>
</tbody>
</table>

Some funding may also be available from non-government sources – talk to Deaf Aorearoa or the New Zealand Federation for Deaf Children.
SECTION 8

CONTACTS & RESOURCES
THE PROFESSIONALS

You’ll meet many new people who can work with you and your child over the next years. This section lists the professionals you’re likely to meet, the service providers you may use, and organisations that you may wish to contact. There is also a list of recommended reading materials, and useful websites.

We have arranged services and resources in alphabetical order within each listing.

Advisor on Deaf Children (AODC)

AODCs are usually qualified teachers experienced in working with deaf children who also have special training in working with families. In most cases, an AODC is a family’s key contact person. They work with family members to help them understand the implication of their child’s hearing loss, and talk to parents about how deaf children can learn to communicate and understand. The AODC may go with a family to visit the audiologist and will adapt the audiologist’s recommendations to suit the needs of each child. They work with other professionals to make sure your child receives all the services they are entitled to.

Audiologist

Audiologists have a post-graduate qualification in hearing assessment and the management of hearing loss. The audiologist is most likely to be the first professional a family will meet when a hearing loss is suspected, and is responsible for accurately diagnosing a child’s hearing loss. The audiologist will help you understand the implications of your child’s hearing loss and will prescribe and fit hearing aids. They will regularly evaluate your child’s hearing aids to ensure your child is making the best use of their residual hearing.

A Paediatric Audiologist is specially trained to work with children.

A Cochlear Implant Audiologist works with children who have a profound hearing loss, during diagnosis and after surgery to ensure a child’s cochlear implant is mapped correctly and provides them with optimal sound. They also provide ongoing audiological support, seeing children at least annually to make sure their device is working appropriately for them and working with families to ensure a child has maximised their language potential.
Auditory-Verbal Therapist (AVT)
An AVT provides intensive therapy that accelerates the way a child would usually develop language and encourages them to speak through listening alone. AVTs offer an individual programme to meet each child’s needs. As well as listening, speech and language, AVTs address the areas of cognition, socialisation, physical, and emotional development. A certified AVT is usually a Speech-Language Therapist or Resource Teacher of Deaf who may have a Masters degree and has studied further to gain this international qualification. AVTs usually work with children who have received a cochlear implant or use hearing aids.

Cochlear Implant Habilitationist
A Cochlear Implant Habilitationist helps to assess the suitability of children referred for a cochlear implant. They also work with the family, the audiological team, and local education providers to coordinate educational management around a child. Generally, these professionals will work with the children on their listening and language development. They may have experience in deaf education. Habilitationists will have completed, or be undergoing, further training in auditory/oral assessment and programming, including Auditory Verbal Therapy.

Ear, Nose and Throat specialist (ENT)
Also known as an Otorhinolaryngologist or ORL, these are surgeons who specialise in managing disorders of the ears, nose, and throat. They examine children’s ears before hearing aids are fitted to determine if there are any additional problems. The ENT specialist may carry out any treatment required, including surgery (for example, putting in grommets) and will be involved in the ongoing management of any ear infections or wax removal. An ENT specialist is an integral part of the cochlear implant assessment team.

Ear Nurse
An Ear Nurse is a specially trained Registered Nurse whose focus is ear health. Ear Nurses work in out-patient clinics, private practice, and with GPs.

Educational Interpreter
This is a qualified sign language interpreter who works with Deaf students using New Zealand Sign Language (NZSL) in the classroom. The interpreter will change from one language to the other to enable hearing teachers and students to communicate with the deaf student.

Educational Psychologist
Registered psychologists sometimes work alongside students, parents, educators, and other mental health services to develop supportive environments for students with difficulties that affect their learning and well-being. In New Zealand most Educational Psychologists work for the Ministry of Education.

Education Support Worker (ESW)
ESWs are similar to teacher's aides. They usually work in ECE centres and kindergartens. They assist with communication, language development and curriculum learning. Their work is supervised by the Ministry of Education. Training for ESWs is provided by AODCs and the Deaf Education Centres and/or The Hearing House.

Hearing Therapy Services
Available through the LIFE Unlimited, Hearing Therapy Services provide aural rehabilitation services for adults 16 years upwards. These services consist of hearing evaluations, needs assessment, consumer information and advice, communication skills, hearing instrument management, and community information and advice. The services are funded through the Ministry of Health to people aged 16 and over with any degree of hearing loss.

Language Assistant
Language Assistants are trained in the Deaf Education Centres and many also complete a Certificate in Deaf Studies through Victoria University. A Language Assistant may be employed to work alongside the classroom teacher and the student, to act as a model for NZSL and Deaf culture.
New Zealand Sign Language Tutor
These tutors are trained to teach NZSL to families, whānau and those who work with Deaf and hearing impaired students. Most hold a Certificate in Deaf Studies from Victoria University. The tutors may teach individuals or groups.

Occupational Therapist (OT)
Occupational Therapists may work with deaf children if and when required to help them participate in activities of daily living.

Ophthalmologist
This is a doctor with special training and an interest in the eyes and visual problems. Some children who are hearing impaired also have visual problems, so it is important that your child’s vision is checked.

ORL (Otorhinolaryngologist)
See Ear, Nose, and Throat (ENT) specialist.

ORS Teacher
See Resource Teacher: Deaf (RTD).

Paediatrician
This is a doctor with specialist training and an interest in children’s health. Some children who are hearing impaired have other disabilities and may need a thorough examination by a paediatrician. Paediatricians may carry out further tests and refer you to other professionals as needed.

Resource Teacher Deaf (RTD)
These are qualified specialist teachers who support students who have special hearing needs. RTDs are trained in areas of language development, developing spoken English and NZSL, assistive technology, and most importantly, the learning needs of deaf and hearing impaired students. School students who qualify (they are known as “verified”) under the Ongoing Resourcing Scheme will be allocated teaching time, delivered by an RTD or Teacher of the Deaf (TOD). These teachers may work alongside the classroom teacher to ensure the child is able to access the curriculum. The RTD can discuss the implications of hearing loss within the school or educational environment, support children, and provide learning support work and advice on appropriate teaching strategies.

RTDs and TODs are mostly employed by the two Deaf Educations Centres (Kelston Deaf Education Centre or van Asch Deaf Education Centre). Some RTDs work with students in their mainstream schools. Others teach at the Deaf Education Centres or in Resource Classes.

Resource Teacher: Learning and Behaviour (RTLB)
RTLBs are qualified specialist teachers who have received extra training to provide advice and guidance to teachers of students at risk of under-achievement due to learning and/or behaviour difficulties. RTLBs are based at a particular school and may work across a group of schools, depending on student needs. The RTLB service is managed by a Lead school which make decisions based on the needs of the students within the cluster.

Resource Teacher: Vision (RTV)
RTVs are specialist teachers, trained to work with children who are blind or vision-impaired. As some hearing impaired or deaf children also have visual difficulties, they may be seen by an RTV. The RTV will provide guidance and advice to the family and the class teacher to ensure the child’s visual learning needs are optimised.

Social Worker / Family Counsellor
Qualified social workers and family counsellors work with individuals, families and groups who may be experiencing practical, emotional or social problems. They are able to provide short or long term support or counselling and can refer families to a range of community resources.
Speech-Language Therapist (SLT)

SLTs work closely with families, whānau, and caregivers in education, home, hospital, and community settings. They may be employed by the Ministry of Education or a school Board of Trustees, Ministry of Health (Paediatric Clinics, Child Development teams), Cochlear Implant Programmes, or be in private practice. They provide assistance, therapy, and early intervention for children and adults with communication delays or difficulties in speech, language, voice, fluency, feeding and swallowing, and phonological awareness/literacy skills.

Teacher of the Deaf (TOD)

See Resource Teacher: Deaf.

Teachers’ Aide

Usually employed by the local primary or secondary school. For children with hearing loss, they help with communication, and with language development and curriculum learning. Teachers’ aides assist the implementation of the IEP under the teacher’s guidance. Some teachers’ aides may have received training through the Deaf Education Centres. Teachers ensure the curriculum is accessible in accordance with the child’s educational goals. Teachers’ aides work alongside the classroom teacher to make sure the child is able to access the curriculum. This includes supporting adaptations to the curriculum and environment, and/or making resources for the student.

SERVICE PROVIDERS

Audiology Services

Audiology services for children are usually provided through public hospitals. These services are normally free. Refer to the front of your phone book for contact details of hospital clinics in your area. Some district health boards (DHBs)/hospitals have contracts with private audiologists to provide children’s audiology services in the hospital clinic. These services are also normally free.

Some private audiology clinics may provide some audiology services to school-aged children and students. There will usually be a charge for an audiologist’s time. These clinics are usually listed in the Yellow Pages of the phone book.

Cochlear Implant Programmes

(of New Zealand)

These programmes see both adults and children, and promote the use of spoken language and an auditory verbal/oral approach. Every child’s individual communication needs are evaluated and the most appropriate method of communication is promoted. Interpreting services are available for the child and family, if required.

There are two service providers. The boundary between the two programmes is an approximate line starting south of New Plymouth, passing north of Ruapehu district, and ending south of Opotiki.

Northern Cochlear Implant Programme, Auckland

(known as The Hearing House)

251-253 Campbell Rd, Greenlane, Auckland
PO Box 74022, Greenlane, Auckland 1546

Phone 09 579 2333
Fax 09 579 2310
Website www.ncip.org.nz
Email reception@hearinghouse.co.nz

Southern Hearing Charitable Trust, Christchurch

Block 1 Milford Chambers, St. George’s Hospital
249 Papanui Road, Merivale, Christchurch 8014
NEW ZEALAND

Phone 0800 500 405
Fax 03 355 3045
Website www.scip.co.nz
Email reception@scip.co.nz
The Hearing House

The Hearing House provides free services to deaf and hearing-impaired children, including Auditory-Verbal Therapy (AVT) and on-site audiology. Its focus is to help deaf children with cochlear implants and/or hearing aids to learn to listen and speak clearly and naturally.

Along with on-site therapy it provides services to deaf and hearing-impaired children living in the upper North Island, including Tele Audio Visual Technology (AVT) which allows children to receive therapy via Skype or video conferencing without the need to travel to Auckland. Most of its graduates attend mainstream school and can speak like their hearing friends by the time they turn five. The Hearing House also offers a counselling service and ECE centre.

The Hearing House provides:

- **Auditory-Verbal Therapy**
  Regularly scheduled one-on-one AVT sessions during which the therapist works with the child and the parent/s for up to an hour every week or fortnight, depending on the child's age and needs.

- **Audiology**
  Children receive audiological services from a qualified audiologist, including hearing tests, specialised cochlear implant services, and hearing aid services for the non-implanted ear.

- **Tele AVT**
  Children who live in remote regions are provided with AVT using internet-based technology such as Skype, or video conference. This allows families of deaf children to benefit from therapy without needing to travel to Auckland.

- **ECE**
  Its ECE is an acoustically designed, purpose-built centre that focuses on developing language skills and taking principles of AVT into a nurturing, language-rich environment where children with a hearing loss learn alongside their hearing peers.

- **Family support**
  Family support and guidance is offered throughout a family's time on The Hearing House programme. This includes home visits, regular parent support groups, and accompanying parents to meetings with medical and social services.

- **Transition to School Programme**
  The Hearing House provides a transition-to-school programme to support the parent, child, and new school during a child's transition into a mainstream school. This ensures a child and his or her family receives the support they need to continue language development, and the school has the knowledge and support it needs to assist the child.

- **Training for Professionals**
  The AVT certified staff at The Hearing House run training courses, workshops and practicum placements for professionals seeking to further their skills and knowledge in spoken language outcomes.

Contact:

The Hearing House, 251 Campbell Rd, Greenlane, Auckland
PO Box 74022, Greenlane, Auckland 1546
Phone 09 579 2333
Email reception@hearinghouse.co.nz
The Southern Cochlear Implant Programme (SCIP)
The SCIP is the provider-arm of the Southern Hearing Charitable Trust and provides clinical and advisory cochlear implant services to children and adults living in the Southern region of New Zealand. The SCIP catchment area includes those living in the South Island and the lower North Island up as far as Taupo.

The SCIP is jointly funded by the Ministry of Health and Ministry of Education. It provides separate adult and paediatric cochlear implant services from its base at St. George’s Hospital in Christchurch. The range of services provided by the SCIP includes:

- cochlear implant assessment (with specialist Audiology, Habilitation, and ENT professionals) for children from birth to 18 years with severe-profound hearing loss
- cochlear implant surgery and hospital after-care
- audiological management post-implant including switch-on, routine MAPping, management of speech processors, FM systems, and repairs
- evaluation of post-implant cochlear implant outcomes such as speech perception testing, standardised language assessment, and other spoken-language and educational measures
- habilitation services in clinic including AVT and Auditory-Oral methods
- outreach habilitation in local schools, early childhood education centres, and the child’s home, on both a visiting and TeleAVT basis
- liaison with other health and educational professionals as required to meet the child’s general communication and educational needs
- training and support of regional and local health and education professionals
- teaching and research.

Contact:
Block 1 Milford Chambers, St. George’s Hospital
249 Papanui Road, Merivale, Christchurch 8014
NEW ZEALAND

Freephone 0800 500 405
Phone 0800 500 405
Fax 03 355 3045
Website www.scip.co.nz
Email reception@scip.co.nz

Hearing Therapy Services
Available through LIFE Unlimited, Hearing Therapy Services provide aural rehabilitation services for adults 16 years upwards. These services consist of hearing evaluations, needs assessment, consumer information and advice, communication skills, hearing instrument management, and community information and advice. The services are free through the Ministry of Health to anyone with a degree of hearing loss.

Contact:
Offices throughout New Zealand via LIFE Unlimited.
20 Palmerston Street, Box 146, Hamilton.

Freephone 0800 008 011
Fax 07 834 9982
Email info@life.org.nz
Website www.life.nzl.org

Kelston Deaf Education Centre (KDEC)
KDEC provides services for Deaf and hearing impaired students throughout the northern half of the North Island. Opened in 1958 as a residential special school, the Centre now offers:

- a licensed ECE centre for students from zero to five years of age (which enrols both hearing and Deaf students)
- services for students from year one to 13 in modern facilities across Auckland
- a two-year life skills Transition Programme for post-secondary year students aged 16 and over
- high quality teaching and learning to Deaf students enrolled at their local school through its Resource Teacher: Deaf network and specialist resource teams.

Contact:
KDEC, Private Bag 93008, New Lynn, Auckland.

Phone 09 827 4859
TTY 09 827 9806
Fax 09 827 9819
Website www.kdec.school.nz

For hearing aid repairs contact the Electronics department at the above numbers or direct on 09 827 9807.

 Websites www.kdec.school.nz
http://signsoflifeatkdec.blogspot.com/
www.totaravillagekdec.blogspot.com/
Marae (Ruamoko Marae)
Situated in the grounds of Kelston Deaf Education Centre, this is the only Deaf Marae in the world.
Māori /Deaf staff and whānau provide support to students and their families in educational planning meetings, hui, Māori Studies programme, carving, Te Reo Māori classes, trips, and advocacy. Te Komiti o Ruamoko Marae includes people from the wider community. ‘Nau te rourou, nuku te rourou ka ora e te iwi e.’ (With your food basket and my food basket together we will feed many).

Contact:
Ruamoko Marae c/- KDEC,
Private Bag 93008, New Lynn
Waea/Fax 09 827 9812

Ministry of Education
Special education staff at the Ministry of Education coordinate and provide extra services and support for children with special education needs to enable them to attend their local ECE service or school. The Ministry can assist with adapted programmes or learning environments, specialised equipment or materials. Its Advisors on Deaf Children (AODC) provide support and guidance for children with significant hearing loss and their families, from the time of diagnosis of hearing loss.

The Ministry of Education funds New Zealand Sign Language Interpreters for Deaf parents to enable them to contribute and participate in their children’s core education activities. This service is available to parents while their children attend primary, intermediate and secondary school.

Core education activities are:
- formal parent-teacher interviews
- individual education plan meetings
- children’s prize giving/special assemblies
- any additional meetings with school staff where any aspect of a child’s education is being discussed
- school enrolment meetings.

The Ministry has contracted iSign, through Deaf Aotearoa New Zealand, to provide this service nationally for 2013. The service is funded by the Ministry and there is no charge to parents or schools. Schools and parents can contact iSign directly at www.iSign.co.nz to book a New Zealand Sign Language Interpreter. The iSign website’s interpreter booking process explains how to book an interpreter and also provides information about the service in New Zealand Sign Language.

Contact:
Van Asch Deaf Education Centre, Truro Street, Sumner, Christchurch
Phone and TTY 03 326 6009
Fax 03 326 5346
Email info@vanasch.school.nz
Website www.vanasch.school.nz

Van Asch Deaf Education Centre (VADEC)
Based in Christchurch, VADEC supports deaf and hearing-impaired children and students throughout the South Island and lower half of the North Island. It offers ECE, primary, middle, and high school programmes for both day and residential students. Satellite classes operate at Hagley Community College and Wharenui Primary School.

VADEC employs Educational Audiologists, Resource Teachers: Deaf, and Specialist Resource Teachers, and has a hearing aid repair service. Resource Teachers offer support with literacy, speech-language, visual communication, and NZSL. The Specialist Resource Teachers also provide outreach services to parents and educational facilities in mainstream settings in the areas of literacy, speech and language, visual communication, and sign language.

VADEC also offers:
- printed and electronic resources
- professional advice on educational management and programmes
- part-time teacher support programmes and habilitation services
- counselling and guidance services, curriculum development and research support programmes.

Local families can attend the Early Intervention Centre. Families living further away are able to receive early intervention support through ECE Residential Courses.

VADEC provides habilitation services for children with cochlear implants through a Memorandum of Understanding with the Southern Hearing Charitable Trust. Habilitationists are based at the Southern Cochlear Implant Programme at St. George’s Hospital. They also provide an outreach service to children’s home areas.

The Centre has residential facilities to cater for those students whose overall personal, social and educational needs cannot be met in their home area. These facilities are also used for assessment of students and in-service and training programmes for parents/caregivers and associated support persons.

Contact:
Van Asch Deaf Education Centre, Truro Street, Sumner, Christchurch
Phone 0800 622 222
Website www.minedu.govt.nz (search special education)
Support Groups and Professional Organisations

Accessible
Accessible is the Ministry of Health’s contracted provider of Hearing Aid Services. It administers the funding and provision of hearing aids for both the Hearing Aid Funding Scheme (which most children with a hearing loss are eligible for) and the Hearing Aid Subsidy Scheme.

Beacon New Zealand
Beacon offers a free parent mentoring programme for parents who have recently been given a diagnosis of hearing loss for their child. All parent mentors have completed an intensive training programme on supporting families. They provide first-hand understanding of what it means to be a parent of a child with hearing loss. They provide unbiased support to help families understand their child’s hearing loss and the choices they will face. They help link families with other families or local parent support groups. Set up in 2011, Beacon is affiliated with New Zealand Federation of Deaf Children.

Contact:
Beacon NZ
Freephone 0800 535 636
Email beacon.newzealand@gmail.com

Deaf Aotearoa New Zealand (DANZ)
Deaf Aotearoa New Zealand (formerly Deaf Association of NZ Inc.), works with government and other organisations to provide information on life for Deaf New Zealanders, Deaf culture and NZSL. Deaf Aotearoa also represents New Zealand Deaf internationally through the World Federation of the Deaf.

It actively promotes the United Nations Convention on the Rights of People with Disabilities where the right of the deaf child to access their culture, identity, and sign language is articulated. DANZ also promotes New Zealand Sign Language Week.

DANZ has a range of resources available through its website, including facts sheets, NZSL kits for schools and DVDs, such as Sign of the Times and Sign with your Baby. A free DVD, Say that Again, offers medical professionals guidance when working with Deaf and hearing-impaired clients.

DANZ owns and operates iSign, a national NZSL interpreting agency.

Contact:
National Office PO Box 15770, New Lynn, Auckland, 0640.
Street address 1836-1848 Great North Rd, Avondale, Auckland.
Phone 09 828 3282
Fax 09 828 3235
Email national@deaf.org.nz
Website www.deaf.org.nz

Deafness Research Foundation
This foundation supports research into the science of hearing impairment and deafness.

Contact:
Deafness Research Foundation, c/- National Foundation for the Deaf, Box 6726, Auckland.
Phone 09 307 2922
Fax 09 397 2923
Email drf@nfd.org.nz
Deaf Societies

Clubs throughout New Zealand provide sporting and recreational opportunities for people of all ages who are Deaf, and support Deaf Culture.

Contacts:
Go to www.canterburydeafclub.org.nz/new_zealand_deaf_societies.htm for details of societies and clubs throughout New Zealand.

Deaf Studies Research Unit

The Deaf Studies Research Unit (DSRU) is housed within the School of Linguistics and Applied Language Studies at Victoria University of Wellington. The DSRU conducts research on topics relating to NZSL, and Deaf people in New Zealand including lexicography, the Deaf community, education, and sign language interpreting. Research is carried out by staff and postgraduate students, and published in books, and academic journals, DSRU occasional publications, and through conference presentations. Staff are available for consultancy in their areas of expertise.

Courses are offered in two main areas:
• NZSL courses for degree students (DEAF 101, 102, 201)
• a one-year certificated training course for Deaf teachers of NZSL

Contact:
The Programme Director, Deaf Studies, School of Linguistics and Applied Language Studies, Victoria University, PO Box 600, Wellington.
Phone 04 463 5626
Website www.victoria.ac.nz/lals/research/projects/DSRU.aspx

“deaf youth together” MAGNET

This is a community and youth-led set of services and programmes for deaf and hearing impaired youth by Deaf Aotearoa and partnership organisations. See www.facebook.com/magnetnz

If you would like to find out more about their services or programmes, contact the Youth Co-ordinator at Deaf Aotearoa www.deaf.co.nz

Hearing Association

This is a volunteer organisation with 29 member associations throughout New Zealand. The Association provides hearing tests (in conjunction with LIFE Unlimited) but does not fit hearing aids. It provides a full range of other assistive devices. The Hearing Association runs public education on the prevention of hearing loss and offers support to hearing impaired people, socially and in the workplace. It advocates for the rights, facilities, and services for all people with a hearing loss.

Contact:
National office
C/- P O Box 1274 Palmerston North 4410
Email enquiries@hearing.org.nz
Website www.hearing.org.nz – has locations of the member associations and further information

National Foundation for the Deaf (NFD)

This incorporated society represents key member groups across the sector including The New Zealand Federation for Deaf Children, Hearing Association of New Zealand, Deafness Research Foundation, New Zealand Society of Otolaryngology, New Zealand Audiological Society, Pindrop Foundation, the Hearing Therapists Association New Zealand, and The Acoustical Society of New Zealand.

Contact:
National Foundation for the Deaf (NFD), PO Box 37729, Parnell, Auckland.
Phone/TTY 09 307 2922
Fax 09 397 2923
Toll free 0800 867 446
Email enquiries@nfd.org.nz
Website www.nfd.org.nz
New Zealand Audiological Society

This is the professional body for audiologists in New Zealand. The Society aims to foster interest and excellence in audiology for the benefit of people with hearing loss and their families.

Contact:
Box 9724, Newmarket, Auckland.
Website www.audiology.org.nz

NZ Federation for Deaf Children Incorporated (NZFDC)

NZFDC is a national group that advocates for deaf and hearing impaired children and their families. It is made up of parents of these children from throughout the country. NZFDC offers information kits for families of newly diagnosed children, tutor fee assistance, assistive equipment subsidy, annual scholarships for tertiary students, and academic excellence awards for secondary school students.

The national executive committee is elected annually from regional parent groups who work on a voluntary basis. Many of the parent groups have newsletters, organise social events, and can offer resources and friendship for parents or caregivers and children.

Contact:
Freephone 0800 DEAFCHILD (0800 332 324)
Website www.deafchildren.org.nz
Facebook New Zealand Federation for Deaf Children Inc
Text 027 214 6901
Email deafchildren@xtra.co.nz

NZ Sign Language Teachers Association (NZSLTA)

This is the professional organisation for NZSL tutors and teachers throughout New Zealand. Formed in 1992, its aim is to promote the teaching of NZSL to the public and to ensure the quality and standards of NZSL teaching. NZSLTA organises workshops and conferences for tutors and teachers so they can fine-tune their teaching skills and develop materials and resources for their classes. It produces monthly newsletters to give information on current issues of sign language teaching.

Contact:
Email info@nzsla.org.nz
Website www.nzsla.org.nz

Parent to Parent

Parent to Parent is a support and information network for parents of children with special needs. They provide a range of supports, including training for parents, activity days, resources, and a matching service that is provided voluntarily by trained support parents who have a child with the same or similar needs. All of their services are free to families.

Contact:
Website www.parent2parent.org.nz/
RECOMMENDED READING

From a library, bookstore, or online sources

**Tip:** if you can’t find a book that is listed here in a library or specialist centre, google the title. It may be available from an online bookseller.


Written by deaf-born Paul Ogden, Professor of Deaf Studies, this American publication provides parents of deaf children with crucial information on the greater possibilities their children have today.


In this American publication from the Barron’s Parenting Keys series, two educators offer advice and encouragement on helping children adapt to deafness. It also has good general advice on parenting.


Based on decades of work with families of deaf children, it is packed with information, advice and encouragement. Indispensable to parents whose child is newly diagnosed.


This book sets out to answer many of the questions parents ask, while also offering a readable and comprehensive examination of deafness. The author looks at language, social and intellectual development of deaf children. It challenges assumptions about what deaf children can and cannot do.


**One Mother’s Story. Raising Deaf Children** by Barbara Luette-Stahlman. 1996. Modern Signs Press Inc.


**Sometimes I Talk, Sometimes I Sign** by Anne McIntosh. 2000. Communication Connection.


Written by deaf-born Paul Ogden, Professor of Deaf Studies, this American publication provides parents of deaf children with crucial information on the greater possibilities their children have today.


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**One Mother’s Story. Raising Deaf Children** by Barbara Luette-Stahlman. 1996. Modern Signs Press Inc.


**Sometimes I Talk, Sometimes I Sign** by Anne McIntosh. 2000. Communication Connection.


**Books and resources from the Deaf education centres**

**Kelston Deaf Education Centre**
www.kdec.school.nz

KDEC has a comprehensive library, ranging from books for parents to stories and novels for children. It has locally-produced, reasonably-priced signed and subtitled NZSL DVDs. Catalogue and order forms can be downloaded from www.kdec.school.nz or visit the library between 9am-4pm weekdays.

**van Asch Deaf Education Centre**
www.vanasch.school.nz

VADEC has a catalogue of locally made resources, including action cards, posters, information sheets and kits, as well as signed and subtitled NZSL DVDs. You can request a free catalogue or place an order via email at library@vanasch.school.nz or visit the Library Media Centre between 8.15am-4.45pm weekdays.
USEFUL WEBSITES

New Zealand

www.accessable.co.nz/hearing.php
 Ministry of Health hearing aid services

www.audiology.org.nz
 New Zealand Audiological Society

www.carers.net.nz
 Information for those who care for disabled family members

www.captionmovies.co.nz
 Information about movies which provide captioning

www.deafchildren.org.nz
 New Zealand Federation for Deaf Children

www.deaf.org.nz
 Deaf Aotearoa New Zealand

www.enable.co.nz
 Enable assists people with disabilities and their families, employers etc

www.ensg.co.nz
 The Ear Nurse Specialist service (ENS)

www.facebook.com/groups/scip.paed/
 South Cochlea Implant Trust (SCIP) Facebook page

www.health.govt.nz/yourhealth-topics/disability-services/
 hearing-and-vision-services
 Ministry of Health services and information

www.healthpoint.co.nz
 Auckland Healthcare Audiology Services NZ

www.hearing.org.nz
 Hearing Association New Zealand website for assistive devices and advice

www.hearinghouse.co.nz
 The Hearing House

www.isign.co.nz
 Isign is an online interpreter booking service

www.kdec.school.nz
 Kelston Deaf Education Centre

www жизни.nzl.org
 Life Unlimited Hearing Therapists

http://www.nfd.org.nz
 National Foundation for the Deaf (NZ) resources and information

www.nzdrfu.co.nz
 New Zealand Deaf Rugby Football Union

www.nzsl.co.nz
 NZ Sign Language (redirects to Deaf Aotearoa site)

http://nzsl.vuw.ac.nz
 Online NZSL dictionary

www.nzsltta.org.nz
 New Zealand Sign Language Teachers Association

www.oticon.org.nz
 The Oticon Foundation which funds hearing impaired-related projects

www.scip.co.nz
 Southern Cochlear Implant Programme (SCIP)

www.slanz.org.nz
 Sign Language Interpreters Association of New Zealand

www.speechtherapy.org.nz
 New Zealand Speech-Language Therapist’s Association

www.vanasch.school.nz
 Van Asch Deaf Education Centre
New Zealand online suppliers of assistive devices and specialised equipment:

www.deafquip.co.nz
www.reidtechnology.co.nz

Many hearing aid manufacturers, such as Phonak (www.phonak.com.nz) and Oticon (www.oticon.org.nz), also have excellent websites with information about hearing loss and hearing aids.

International sites

www.agbell.org
Alexander Graham Bell organisation promotes verbal communications

www.baha-users-support.com
Information for users of hearing aids

www.deafchild.org
Deaf Child International information for parents and fun for children

www.deafnessforum.org.au
Deafness Forum of Australia

www.deafchildrenaustralia.org.au
Deaf Children Australia provides a range of services to families with deaf and hard of hearing children

www.earcommunity.com
Parent support for children with hearing loss, Microtia, Atresia

www.earfoundation.org
Non-profit organisation to educate about hearing loss

www.forestbooks.com
Listings of books and other resources on deafness and deaf issues

www.handsandvoices.org
Supporting families without bias; family stories on video clips

www.healthyhearing.com
Hearing aids information with hearing test, frequently asked questions, news etc

www.johntracyclinic.org
Parent centre services to young children with a hearing loss

www.ndcs.org.uk
National Deaf Children’s Society (UK) a charity for families

www.otikids.com
Good general information for families and children’s activities

www.wordsforlife.org.uk
Search Deaf. Excellent site with learning tips and ideas