Demonstrate knowledge of hearing impairment

23375 V1

Name _________________________________________________

Careerforce reference number _____________________________________
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Name ________________________________________________
Employer ______________________________________________
NZQA number _________________________________________
Date _________________________________________________
“All the answers in this workbook were completed by me.”
Signed _______________________________________________
Getting started

Welcome to
Demonstrate knowledge of hearing impairment:
one in a series of workbooks especially developed for support workers in the CPQ (Career Pathway Qualifications).

How do I use this workbook?
- Use highlighters to identify the important ideas.
- Take your own notes.
- Complete activities as you go through the workbook and write answers in the spaces provided.

What will I learn about?
When you have finished this workbook you will have learned more about:
- Hearing, structures and functions of the ear.
- Understanding sound.
- Causes and types of hearing loss.
- The psychosocial impact of hearing loss.
- Support for people who are hearing impaired.

Acknowledgements
This workbook has been designed to support your learning and prepare you for the unit standard assessments.

The contents of this workbook include scenarios, learning activities and activities for general health and disability settings. They are not specific to any setting and should be used as a general guide for learning.

Careerforce would like to thank the people who have contributed their time and effort into each workbook in:
- Research and content validation.
- Advice and expertise.
- Testing of activities and assessments and their personal experiences.

And the people who have contributed a human dimension to the workbooks.

Look before you leap!
Take the time to go through this workbook before starting on the activities. Read the sections and make notes as you go.
Getting started

Trainee assessment portfolio
The trainee assessment portfolio contains assessed activities and workplace verification which must be completed to meet the requirements of the unit standard. These questions or tasks must be completed by you and signed by your workplace assessor in order for you to be credited with the unit standard.

Learning activities
These help you understand the content, and will help you with workplace verification tasks. The instructions and answer panels for learning activities have a light yellow/orange background like this.

Stop activities
You will also come across the pencil in places where you are asked to STOP (see the graphic on the left) and record your current knowledge or impressions, as a reference point to return to later.

Pause and Rewind activities
Pauses are for summarising, questioning, and reflecting as a reference point to return to later. Rewinds take you back to a PAUSE, STOP or TEST YOUR KNOWLEDGE and give you an opportunity to add to, change or validate some of your initial thoughts and ideas.
Before you go any further in this workbook, think of what you know about hearing impairment…

## TEST YOUR KNOWLEDGE

**Name the basic structures of the ear.**

[Diagram of the ear]

**In your own words, explain how you think the ear works?**
What do you think could be the psychosocial impacts on a person with a hearing loss?

Name two agencies that support people with hearing loss:

Name three types of hearing loss:

1

2

3
Hearing, structures and functions of the ear

Basic mechanics of hearing

Hearing is the process by which humans use their ears to detect and perceive sounds. Ears are important for hearing and for controlling a sense of position and balance.

Each ear is divided into three sections:

- The outer ear.
- The middle ear.
- The inner ear.

The middle and inner parts of the ear are located in hollow spaces on either side of the head within the temporal bones of the skull.

To hear sound, the ear has to do three basic things:

- Direct the sound waves into the hearing part of the ear.
- Sense the fluctuations in air pressure.
- Translate these fluctuations into an electrical signal that the brain can understand.
The outer ear

The external part of the ear consists of the pinna and ear lobe. The pinna is the shell-like part of the external ear, and is made of cartilage and skin. The pinna directs sound waves from the outside into the external auditory canal (ear canal), which in turn channels sound waves to the tympanic membrane (known as the eardrum) causing it to vibrate. The tympanic membrane is a thin, semi-transparent, flexible membrane that separates the outer and middle ear. The outer ear functions to collect sound (acoustic energy), and funnel it to the eardrum (tympanic membrane).
The middle ear

The middle ear is an air-filled space that contains three tiny bones known as ossicles which transmit sound. The bones are known individually (according to their shapes) as the:

- Malleus (hammer).
- Incus (anvil).
- Stapes (stirrup).

Sound waves that reach the tympanic membrane cause it to vibrate. In turn, the eardrum sets into motion the first ear bone, which transmits the motion to the second bone (the incus). Finally, the third bone (the stapes) works like a piston to amplify and transform the sound energy into mechanical energy.

This mechanical energy is then transmitted from the stapes to the hearing part (cochlea) of the inner ear via the oval window (a thin membrane between the middle and inner ear).

The middle ear is connected to the back of the nose (nasopharynx) by the Eustachian tube.

Hearing, structures and functions of the ear
The Eustachian tube
The Eustachian tube is a narrow tube that connects the middle ear to the back of the nose and throat. During swallowing, the Eustachian tube opens up to allow air into the middle ear, so that air pressure on either side of the tympanic membrane is the same. In some situations when there is a sudden change in air pressure (for example – during take off and landing in a plane), the pressure in the middle ear is not the same as the outside air pressure. This can make the eardrum bulge or retract and less able to transmit vibrations, causing temporary hearing problems. By swallowing or “popping” the ears, the pressure can again be equalised.
The inner ear

The delicate membranous inner ear (labyrinth) is enclosed and protected by a bony chamber that is referred to as the bony labyrinth. The inner ear contains two main structures:

- **The cochlea**, in the shape of a snail, which is involved in hearing. The round window (fenestra cochlea) is a membrane that connects the cochlea to the middle ear. It helps dampen the vibrations in the cochlea.
- **The vestibular system** (consisting of the semicircular canals, saccule and utricle), which is responsible for maintaining balance and a sense of position.
The cochlea

The cochlea is filled with fluid and contains the organ of Corti – a structure that contains thousands of specialised sensory hair cells with projections called cilia. The cochlea has approximately 30,000 hearing nerve endings in the hair cells. The hair cells in the large end of the cochlea respond to very high-pitched sounds, and those in the small end (and throughout much of the rest of the cochlea) respond to low-pitched sounds. These hair cells, and the nerve that connects them to the brain, are susceptible to damage from a variety of causes.

The vibrations transmitted from the middle ear cause tiny waves to form in the inner ear fluid, where they are interpreted as sound. As the stapes pushes back and forth against the cochlea, it compresses the fluid to create waves in the fluid-filled compartments which make the cilia vibrate. Depending on the characteristics of the waves, specific nerve messages (impulses) are created. The hair cells then convert these vibrations into nerve impulses, or signals, which are sent via the auditory nerve (the hearing branch of the eighth cranial nerve) to the base of the brain (brainstem) and brain where they are interpreted as sound.
The vestibular system
(the semicircular canals, saccule and utricle)

The semicircular canals also contain fluid and hair cells, but these hair cells are responsible for detecting movement rather than sound. As the head moves, fluid within the semicircular canals (which sit at right angles to each other) also moves. This fluid motion is detected by the hair cells, which then send nerve impulses about the position of the head and body to the brain to allow balance to be maintained.

The utricle and saccule work in a similar way to the semicircular canals, allowing you to sense your body’s position relative to gravity and make postural adjustments as required.
Learning activity
Cut out this page and then carefully cut out the boxes containing the names and structures of the ear.

Using the diagram of the ear on page 15, match the name and description of the structures of the ear to the correct place on the diagram.

- **Pinna** (also called the auricle) the visible part of the outer ear. It collects sound and directs it into the outer ear canal.
- **Hammer** (also called the malleus) a tiny bone that passes vibrations from the eardrum to the anvil.
- **Anvil** (also called the incus) a tiny bone that passes vibrations from the hammer to the stirrup.
- **Eardrum** (also called the tympanic membrane) a thin membrane that vibrates when sound waves reach it.
- **Semicircular canals**—three loops of fluid-filled tubes that are attached to the cochlea in the inner ear. They help us maintain our sense of balance.
- **Eustachian tube**—a tube that connects the middle ear to the back of the nose; it equalises the pressure between the middle ear and the air outside. When you “pop” your ears as you change altitude (going up a mountain or in an aeroplane), you are equalising the air pressure in your middle ear.
- **Nerves**—these carry electrochemical signals from the inner ear (the cochlea) to the brain.
- **Stirrup** (also called the stapes) a tiny, U-shaped bone that passes vibrations from the stirrup to the cochlea.
- **Cochlea**—a spiral-shaped, fluid-filled inner ear structure; it is lined with cilia (tiny hairs) that move when vibrated and cause a nerve impulse to form.
- **Outer ear canal**—the tube through which sound travels to the eardrum.
Demonstrate knowledge of hearing impairment
Understanding sound

To understand how we hear sound, we need to understand exactly what sound is.

From the study of physics we learn that an object produces sound when it vibrates in matter. This object could be:

- A solid, such as earth.
- A liquid, such as water.
- A gas, such as air.

Most of the time we hear sounds travelling through the air in the atmosphere. When something vibrates in the atmosphere, it moves the air particles around it. Those air particles in turn move the air particles around them, carrying the pulse of the vibration through the air. These are called sound waves.

Sound waves

Sound waves are characterised by:

- Frequency (measured in cycles per second, cps, or hertz, Hz).
- Amplitude: the size of the waves.

Low-frequency waves produce low-pitched sounds (such as the rumbling sounds of distant thunder) and high-frequency waves produce high-pitched sounds (such as a mouse squeak).

Sounds audible to the human ear usually range from as low as 20 Hz to as high as 20,000 Hz in a young child (the upper range, in particular, decreases with age). How loud something is, is measured in decibels (dB): a measure of the energy content or power of the waves proportional to amplitude. The decibel scale begins at 0 for the lowest audible sound, and increases logarithmically, meaning that a sound of 80 dB is not just twice as loud as a sound of 40 dB, but has 10,000 times more power!
Understanding sound

To understand how sound is transmitted, consider a simple vibrating object such as a bell. When you hit a bell, the metal vibrates—flexes in and out. When it flexes out on one side, it pushes on the surrounding air particles on that side. These air particles then collide with the particles in front of them, which in turn collide with the particles in front of them, and so on. This reaction is called compression.

When the bell is moved away, it pulls in on the surrounding air particles. This creates a drop in pressure, which pulls in more surrounding air particles, creating another drop in pressure, which pulls in particles even farther out. This pressure decrease is called rarefaction.

A vibrating object sends a wave of pressure fluctuation through the atmosphere. We hear different sounds from different vibrating objects because of variations in the sound wave frequency. A higher wave frequency simply means that the air pressure fluctuation switches back and forth more quickly. We hear this as a higher pitch. When there are fewer fluctuations in a period of time, the pitch is lower. The level of air pressure in each fluctuation—the wave’s amplitude—determines how loud the sound is.

Depending on wave frequency we hear either high or low sounds.

Higher wave frequency = high pitch. Lower wave frequency = low pitch.
Deafness and hearing impairment

Hearing loss affects up to 10% of the population in New Zealand. It is an invisible condition which impacts on people of all ages and at all levels of society.

Hearing loss is a loss of perception of the loudness and/or clarity of sounds.

Deafness is temporary or permanent impairment or loss of hearing. This loss can be:
- Partial (where there is a mild loss of hearing sensitivity).
- Complete (in which there is a total loss of hearing).

Hearing loss can be described as:
- Congenital or,
- Acquired.

A congenital hearing loss is one that is present at, or soon after, birth.

An acquired loss is one that occurs later on.
Deafness and hearing impairment

Age of onset of hearing impairment.

Hearing loss can be described in terms of when it occurs in the process of the development of speech:

- A pre-lingual hearing loss occurs where the hearing is lost before a child has completely developed speech and language. Pre-lingual hearing loss may be congenital or acquired in the first few years of life, and can affect how well a child learns to speak. All congenital (present at birth) hearing loss is pre-lingual, but not all pre-lingual hearing loss is congenital. Hearing loss that occurs at this stage can have a far-reaching impact on verbal and social skill development. Most pre-lingual hearing impairment is due to an acquired condition, usually either disease or trauma.

- A post-lingual hearing impairment is more common and means the hearing loss is acquired after speech and language have developed (usually considered to be after six years of age). Often, the hearing loss develops gradually and may be noticed by family and friends before the person notices it him/herself. Loneliness and depression can arise as a result of isolation (from the inability to communicate with friends or work colleagues).

Pre-lingual – hearing loss that occurs before a child has fully developed speech and language skills.

Post-lingual – hearing loss that occurs after the child has developed speech and language skills.
Deafness and hearing impairment

Ways of considering hearing loss. The deaf and hearing impaired community is very diverse, differing greatly in terms of the cause and degree of hearing loss, age of onset, educational background, communication methods, and how people feel about their hearing loss.

Deafness and hearing impairment can be considered as:

• Audiological.
• Cultural.
Deafness and hearing impairment

Audiological – focuses on the cause and severity of the hearing loss, and whether or not hearing can be used for communication purposes. Generally, the term “deaf” refers to those who are unable to hear well enough to rely on their hearing and to use it as a means of processing information. The term “hard of hearing” refers to people who have some hearing, and are able to use it for communication purposes. A hard-of-hearing person, in audiological terms, may have a mild to moderate hearing loss.

Cultural – refers to a particular group of deaf people who share a language (for example – New Zealand Sign Language) and a culture. These people have developed sign language to use as a primary means of communication among themselves, as well as to express a full range of day-to-day, in-depth thoughts, feelings, emotions and needs. Members of this deaf cultural group hold a set of beliefs about themselves and their connection to wider society, which differs from the beliefs of those who lose their hearing due to illness, trauma or age. Although these people all share the condition of “not hearing”, they do not have access to the same knowledge, beliefs, and practices that make up the culture of deaf people.

However, terms such as “hard-of-hearing” can also be used to describe a person with a mild-to-moderate hearing loss, or a deaf person who doesn’t have or want any cultural affiliation with the Deaf community. How people “label” themselves in terms of their hearing loss is personal and can reflect either identification with the Deaf community or simply how their hearing loss affects their ability to communicate in a “hearing world”. For everyone with a hearing loss, it is a matter of deciding whether to treat it from an audiological perspective or as a cultural and lifestyle issue. It’s all about choices, the person’s comfort level, ways of communicating, and the level of acceptance of the person’s hearing loss.
Causes of hearing loss

Causes of hearing loss
The most common causes of hearing loss are:

- Childhood illnesses (for example, otitis media, spinal meningitis and rubella).
- Pregnancy-related illnesses that affect the foetus (such as rubella or dependence on drugs/alcohol).
- Toxins.
- Injury (a severe blow to the head can damage the hearing).
- Excessive or prolonged exposure to noise.

- Sensorineural hearing loss resulting from a genetic predisposition. Scientists studying aspects of heredity and mapping of the human genome have identified at least fifty "deaf" genes and believe there are many more still to be identified.
- Ageing, in which there is progressive deterioration of hearing as a natural part of the ageing process. Older adults suffer most often from hearing loss which can affect up to a third of people aged over 65. This loss increases with each further decade of ageing.
Types of hearing loss

There are three main types of hearing loss:

- Conductive hearing loss.
- Sensorineural hearing loss.
- Mixed hearing loss.

Conductive hearing loss

Conductive hearing loss occurs when sound is not transmitted efficiently through the outer ear canal to the middle ear. Conductive hearing loss can be acquired or congenital and leads to a loss of volume. It can often be corrected. Conductive hearing loss usually involves a reduction in sound level, or the ability to hear faint sounds.

People experiencing this type of hearing loss find it difficult hearing someone in a noisy environment or from a distance. They may find some higher pitched voices or words hard to pick up. It may be necessary to listen to the television or radio at a volume that is too loud for others, or the person may not always hear the telephone or doorbell when it rings. Conductive hearing loss can often be treated effectively either medically, surgically or through amplification with an assistive device such as a hearing aid.

Examples of conditions that may cause conductive hearing loss include:

- Conditions associated with the middle ear such as fluid in the middle ear from colds, allergies (serous otitis media), blocked Eustachian tubes, ear infection (otitis media), perforated eardrum or benign tumours.
- Impacted earwax (cerumen).
- Infection in the ear canal (otitis externa).
- Presence of a foreign body.
- Absence or malformation of the outer ear, ear canal or middle ear.
Types of hearing loss

**Sensorineural hearing loss**

Sensorineural hearing loss occurs as a result of damage in the inner ear (cochlea) or auditory nerve. It reduces loudness and clarity of sound and can be acquired or congenital. As well as the sound not being loud enough, it is distorted so that it can’t be understood by the listener – a bit like listening to a foreign language. People who are born deaf, or children who become deaf before they learn to speak, find it extremely difficult to develop clear speech. The hearing loss is usually permanent.

Sensorineural hearing loss can be caused by diseases, birth injury, drugs that are toxic to the auditory system, and genetic syndromes. Sensorineural hearing loss may also occur as a result of noise exposure, viruses, head trauma, ageing and tumours. It is the most common type of hearing loss among adults (occurs in 80 percent of adult cases).

**Mixed hearing loss**

Mixed hearing loss occurs when someone has both conductive and sensorineural hearing problems. This term is used only when both types of hearing losses are present in the same ear. However, the emphasis is on the conductive hearing loss, because treatment is so much more effective for this type of hearing loss.
Types of hearing loss

There are other less common types of hearing loss which include:

**Central hearing loss**

Central hearing loss refers to a problem with the eighth cranial nerve, auditory brainstem, or cerebral cortex of the central nervous system, and affects the person’s ability to filter out competing auditory signals. It is a common condition that is classified as a learning disability rather than a hearing disorder. People with central auditory processing disorders have difficulties that include:

- Problems “hearing” when there are several conversations going on.
- Inability to read or study with the radio or television on.
- Problems reading if someone turns on a vacuum cleaner or air conditioner near them.
- Missing the first sentence from people talking to them when they are involved in an auditory attention task (such as watching television).

**Functional hearing loss**

Functional hearing loss involves a psychological or emotional problem, rather than physical damage to the hearing pathway. Individuals with this type of hearing loss do not seem to hear or respond but do have normal hearing.
Understanding hearing loss

Degree of hearing loss
A person who can hear sounds across a range of frequencies at 0 to 20 dB is considered to have normal hearing. The human ear in younger people can hear frequencies from about 20 Hz to 20,000 Hz, and can detect frequency differences as small as 0.2%. This means it is possible to tell the difference between a sound of 1000 Hz and one of 1002 Hz.

There are generally accepted thresholds to identify different levels of hearing loss which are as follows:

- **Mild hearing loss** (20 to 40 dB)
  A person with mild hearing loss may hear speech, but only fragments. Short words, some word endings, and indistinct word sounds will tend to drop out and not be heard. Background noise in the environment can make it even harder to hear. Hearing aids may be recommended.

- **Moderate hearing loss** (41 to 60 dB)
  A moderate hearing loss can lead the person to miss 50 percent of speech. This loss can increase with high levels of background noise. With a child, a moderate hearing loss can limit vocabulary and unclear pronunciation. There may also be a “flat” voice quality with little inflection because of an inability to monitor the sound of the person’s voice.

- **Severe hearing loss** (61 to 90 dB)
  A person with this degree of hearing loss will not hear most speech sounds. In addition, a child would have problems developing speaking skills and will require sounds to be amplified with hearing aids as well as receiving support with speech and language therapy.

- **Profound hearing loss** (91 dB and above)
  A person with a profound hearing loss will almost never hear sounds (especially speech). A child is unlikely to develop speech without the use of hearing aids or cochlear implants.
Understanding hearing loss

Configuration of hearing loss

The configuration or shape of the hearing loss refers to the extent of hearing loss at each frequency and how this affects the person’s overall hearing. For example, a hearing loss that only affects the high frequencies would be described as a high-frequency loss. Its configuration would show good hearing in the low frequencies and poor hearing in the high frequencies. On the other hand, if only the low frequencies are affected, the configuration would show poorer hearing for low tones and better hearing for high tones. Some hearing loss configurations are flat, indicating the same amount of hearing loss for low and high tones.

Other terms associated with hearing loss are:

- Bilateral hearing loss which means that both ears are affected.
- Unilateral hearing loss which means that only one ear is affected.
- Symmetrical hearing loss which means that the degree and configuration of hearing loss are the same in each ear.
- Asymmetrical hearing loss in which the degree and/or configuration of the loss is different for each ear.
- Progressive hearing loss which is a hearing loss that becomes increasingly worse over time.

- Sudden hearing loss which has an acute or rapid onset and therefore occurs quickly. It requires immediate medical attention to determine its cause and treatment.
- Fluctuating: Some hearing losses change – sometimes getting better, sometimes getting worse. Fluctuating hearing loss is typically a symptom of conductive hearing loss caused by ear infection and middle ear fluid, but also presents in other conditions such as Meniere’s disease.
- Stable hearing loss which is consistent over time.
The psychosocial impact of hearing loss

Hearing loss can affect speech and language development in infants and young children and lead to communication difficulties for adults.

Hearing loss is often described as an invisible disability. It can lower a person’s quality of life, and can have far-reaching psychological, physical and social consequences, especially if it is left untreated for any length of time.

For the hearing impaired, trying to keep up in conversations and overcoming the anxiety of being in social settings is very stressful. Besides the embarrassment of hearing only parts of a sentence, many other factors cause difficulty in social settings. People describe feeling that they are “slow to catch on” or “hearing but not understanding”. These situations can lead to a social withdrawal syndrome shown by remarks such as, “I don’t think I want to go there anymore”. The hearing-impaired person begins to avoid certain situations and certain people because “they mumble”. All of these issues cause a drop-out from social functions as well as disturbed relationships.

Hearing loss first causes a person to miss certain soft sounds: mostly consonants. The vowels “a”, “e”, “i”, “o” and “u” are more distinct. The hearing loss causes letters to “fall out” of the words or sentences. When a letter falls out of a word, a syllable is blurred or a word seems garbled. Consequently a person only hears part of the sentence, and may feel quite inadequate.

Some skills may help a person who is trying to make sense of a conversation. Watching another person’s face, facial expression and lip movement may help the person interpret the message. There are many letters easily differentiated when their pronunciation is seen, such as the difference between “p” and “b”. This then becomes a process of mentally solving the puzzle by “speech reading”. Frequently the person may need to wait for the next sentence to understand the meaning fully.
The psychosocial impact of hearing loss

Effects of hearing loss on child development.

It is well recognised that hearing is critical to speech and language development, communication and learning. The earlier hearing loss occurs in a child's life, the more serious the effects on the child's development. Similarly, the earlier the problem is identified and intervention begun, the less serious the overall effect. Recent research indicates that children identified with a hearing loss who begin services early may be able to develop language (spoken and/or signed) at the level of their hearing peers.

There are four major ways in which hearing loss affects children and young adults.

- It causes delay in the development of receptive and expressive communication skills (speech, language and vocabulary).
- The language deficit causes learning problems that may result in reduced academic achievement.
- Communication difficulties often lead to social isolation and poor self-esteem.
- It may also have an impact on choice of vocation, or result in discrimination or negative attitudes towards a hearing impaired person.
The psychosocial impact of hearing loss

**Communication**
The most obvious consequence of hearing loss is communication difficulties.

- Conversations are shorter.
- Less use of the telephone.
- Problems communicating with family, friends and co-workers.
- Asking others to repeat more often or simply going along with the conversation.

**Social**
As the ability to hear deteriorates, many people find themselves withdrawing from social interactions.

- Avoiding groups and strangers.
- Decreased efficiency at work.
- Silence and withdrawal.

**Emotional**
Untreated hearing loss can cause people to experience a range of emotions.

- Anger or frustration.
- Lack of concentration.
- Depression.
- Embarrassment.
- Anxiety.
- Uncertainty.
- Incompetence.
- Strain on interpersonal relationships.
Misconceptions about hearing loss and hearing aids

Hearing impaired people are subject to prejudice and misconceptions.

The hearing impaired person may be considered to be:

- Old.
- Less intelligent.
- Mentally ill.
- Only hearing what he/she wants to hear.

Many people also think that hearing aids are unsightly, uncomfortable, expensive and do not function optimally, or they may put off obtaining an aid or avoid using it. Stigmas such as the belief that hearing aids are for senior citizens are known to limit hearing aid use. Hearing impaired people may say they would rather live with some hearing loss than wear a hearing aid.

Some examples of different types of hearing aids.

[Images of hearing aids]
What is a hearing aid?
Hearing aids are devices that amplify sounds to make them more audible to a person with a hearing loss. They do not cure the hearing loss but are helpful in improving the range of sounds that can be heard.

What is a cochlear implant?
Sometimes called a bionic ear, a cochlear implant is a hearing device designed to produce useful hearing sensations by stimulating nerves inside the inner ear electrically. It is surgically implanted and suitable for children and adults with severe or profound hearing impairment.
The effect of hearing loss on day-to-day functioning is seen in activities of daily living at home, at work, and in social or business situations.

The ability of an individual to carry out daily tasks is influenced not only by hearing ability, but also by other situational factors such as background noise, competing signals, room acoustics, and familiarity with the situation. Such factors are important regardless of whether a person has a hearing loss, but the effects are magnified when hearing is impaired. This leads to perceptions about the functioning of a hearing impaired person.

For example, when a person with normal hearing engages in conversation in a quiet, well-lit setting, visual information from the speaker’s face, along with situational cues and linguistic context, can make communication quite effortless. In contrast, in a noisy environment, with poor lighting and limited visual cues, it may be much more difficult to carry on a conversation or to give and receive information.

A person with hearing loss may be able to function very well in the former situation but may not be able to communicate at all in the latter. A person in this situation may be considered to be less intelligent, “slow”, or mentally unwell as a consequence.

The association of hearing impairment with older people and with disability, as well as the challenges presented by hearing impairment itself, create further barriers for a person with hearing loss. The effects of the hearing loss cannot be hidden and attempts to do so soon become counterproductive. By not helping themselves (for example, by not wearing a hearing aid), people who deny their hearing loss become even more disabled in their functioning and reputation. And this situation reinforces negative attitudes against hearing impaired people in wider society.
Communicating better with a deaf or hearing impaired person

Awareness of the following points will improve your communication and relationship with a person who is deaf or hearing impaired.

Communication between deaf or hearing impaired people and hearing people works far better when the hearing person makes an effort to adapt to the deaf or hearing impaired person’s communication needs.

Background noise and hearing impaired people

Background noises are confusing for hearing impaired people. Traffic, television, radio and other people talking make it difficult for them to hear. Under these conditions, make a special effort to speak clearly and audibly. At parties or meetings include hearing impaired people in ongoing conversations. In some situations, it may be necessary to move to a quieter area of the room.

A hearing aid doesn’t make a person’s hearing normal. It makes sounds louder, but not always clearer. It is difficult to separate speech from unwanted sounds, so be patient.
Communicating better with a deaf or hearing impaired person

Body language and positioning for people who are deaf
Facial expressions, eye contact and gestures are very important in a visual language. Hearing people might find deaf people “over the top” with their expressions and gestures. Deaf people often think hearing people are dull and unresponsive.

Deaf people like to sit or stand slightly further away when talking to another person to give themselves room to sign, when they are using sign language – which is one of three official languages of New Zealand.

Nine “golden rules” for communicating with people who are deaf or hearing impaired

1. Get the person’s attention.
2. Face the person and stand in close proximity. Don’t turn or lower your head, which reduces the volume of sound reaching the person’s ears. Try to be within one metre of the person. Beyond that your voice may be faint and other sounds may interfere with hearing.
3. Have the light on your face and don’t cover your mouth. Light behind you is distracting and will lessen the person’s ability to see and read your lips.
4. Speak more slowly than usual (but not too slowly). Give the person time to assimilate what is being said.
6. Speak loudly, if necessary. Don’t shout. Shouting distorts sounds and is painful to the wearer of a hearing aid.
7. Rephrase your sentence. Don’t repeat the same words if you are not being understood.
8. Speak expressively and use face, hand and body movements.
9. Be ready to use a pen and paper if necessary.
In 1978, the Lions Club of New Zealand approached groups representing deaf and hearing impaired people to come together and seek common goals. These groups became the five member groups of “The Combined New Zealand Societies for the Deaf”.

The organisation has continued to develop and expand and is now known as The National Foundation for the Deaf (NFD): an incorporated society which acts as an umbrella, non-profit, non-government organisation concerned with the health, welfare and education of all deaf and hearing impaired people. It promotes the interests of nearly half a million deaf and hearing impaired New Zealanders. It is a coalition of professional and community groups that work together to raise awareness of the importance of hearing and the consequences of hearing loss. The organisation also promotes the rights of deaf and hearing impaired people, and endeavours to remove barriers that limit their full enjoyment of life.
Support for people who are deaf or hearing impaired

The organisation relies on volunteers and public donations to achieve its goals. It also works with member groups to:

- Support New Zealanders with hearing loss.
- Encourage people to preserve their hearing.
- Promote good sound.

The NFD has six member groups. Each group has a different focus. All are committed to promoting good hearing and helping those with hearing impairment.

The six groups are:

- Hearing Association New Zealand.
- Deafness Research Foundation.
- New Zealand Acoustical Society.
- New Zealand Audiological Society.
- New Zealand Federation for Deaf Children.
- New Zealand Society of Otolaryngology, Head and Neck Surgery.

The NFD website www.nfd.org.nz provides links to many useful related sites associated with hearing impairment.
The member groups assist and support each other by working together to share ideas, manage joint projects and contribute to publications about hearing issues. They also distribute a quarterly newsletter to members. There are campaigns such as promoting sign language and preserving hearing loss in the home and workplace through improving awareness about noise exposure. A recent research project identified increasing numbers of New Zealanders under 30 reporting signs of permanent hearing loss.

NFD has a Trust which receives bequests and legacies that provide scholarships for the hearing impaired or for those undertaking studies which will benefit others with hearing loss. There is also an NFD educational scholarship awarded to deaf students. The “Quest for Excellence” scholarship provides a high value award for postgraduate study for deaf or hearing impaired graduates.

NFD produces detailed information fact sheets and posters covering topics such as specific conditions, for example—acoustic neuroma, glue ear, tinnitus, screening for babies and children, children in the classroom, cochlear implants, hearing aids, noise damage, noise in the workplace, New Zealand Sign Language and many other related topics.

The “Sound Advice” brochure contains a wealth of information on hearing loss, including where to go for help and further advice.
Support for people who are deaf or hearing impaired

The Hearing Association

The Hearing Association is a member of NFD and is a well-known voluntary organisation operating throughout New Zealand. It provides support, information and educational services at a local level to adults with impaired hearing. Some branches also support children and young adults. Hearing Associations throughout New Zealand offer unbiased information about hearing matters, and provide a valuable first point of contact to hearing impaired people, their families and friends.

The Association provides encouragement and advice on how to get assistance for purchase of suitable hearing devices. Each local branch may develop support services relevant to its community, including support from hearing therapists and regular newsletters which update members on developments and advances in hearing technologies. There may be social activities and guest speakers at the branch meetings. The Association can also provide advice on what financial assistance is available for the purchase of a hearing device.

In some areas the branches provide information and can demonstrate and sell assistive listening devices that may help the person’s daily life, such as telephones, TVs and alarm clocks. They may offer hearing aid batteries and other hearing aid equipment for purchase, including wax guards, as well as equipment to help dry hearing aids that have inadvertently become wet. The Association is also able to arrange for a trial of hearing devices to help people decide what works best for the individual.
Support for people who are deaf or hearing impaired

The national Hearing Association has a website available: www.hearing.org.nz. The Association is active at a national level in promoting the profile of the hearing impaired. This includes public awareness activities such as:

- Television subtitles.
- Advertising.
- Funding for hearing aids.
- Noise levels.

Practical aspects to improving awareness of hearing loss include producing and distributing yellow Customer Hearing Stands that encourage both customers and staff to assist one another in communicating effectively; and also wallet cards that hearing impaired people can carry to alert others of their difficulty in communicating and how best to help them. These are free of charge.

Did you know…?

…That Income Support has a video in sign language called “Deaf Link” describing services that it offers, including providing free interpreters for Income Support interviews.

…That some children, especially those with autism spectrum disorder or Asperger syndrome, can experience “sensory integration disorder” which is a hypersensitivity to sound. This condition can interfere with their attention, comprehension and ability to learn. The fear and anticipation of certain sounds can influence behaviour and lead to tantrums and even physical symptoms.
Find out more about the NFD member groups and the services they offer…

- Deafness Research Foundation
- NZ Acoustical Society
- NZ Federation for Deaf Children
- NZ Audiological Society
- NZ Society of Otolaryngology
- Hearing Association New Zealand
Do you agree with your initial thoughts and ideas?

**yes**

If yes, do you have anything you would like to add?

**no**

If no, what would you change?

If you have any more questions, what could you do or who could you ask to find the answers?
When you have completed the trainee assessment portfolio and have been signed off as competent by your assessor, your assessor will complete a Certificate and give it to you.

If you wish, you could frame it for display or mount it in a record book.
You have now completed

23375 V1 Demonstrate knowledge of hearing impairment:

treated of a Careerforce learning series designed for support workers in a health or disability setting.

Disclaimer: The images contained in these workbooks are visual illustrations only and are not representative of actual events or personal circumstances.