

Seen and Heard

Ending the Isolation
for older adults with
combined vision and
hearing impairment.



AN INITIATIVE BY

SENSES
AUSTRALIA

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Introduction

Combined vision and hearing impairment is sometimes referred to by specialists as “deafblindness”, “dual sensory loss”, or “dual sensory impairment”. A person with combined vision and hearing impairment would fall within one of the following categories:

- Born blind or vision impaired, later becoming hard of hearing or deaf
- Born Deaf or hard of hearing, later becoming blind or vision impaired
- Born with sight and hearing, later experiencing deterioration of both vision and hearing
- Born with combined vision and hearing impairments

It is not unusual for older people to experience a decline of their vision and hearing. Often seen as a consequence of the ageing process, it can be easy to overlook the needs resulting from combined vision and hearing impairment in older people who may also have other health or physical conditions.

Relatives, carers and support networks are often unsure what resources and options are available for individuals experiencing difficulties associated with declining senses. While adapting to vision and hearing loss poses many challenges, there is much that can be done to improve quality of life.

Having led a full and active life, for some older people, the onset of deteriorating vision and hearing can affect their ability to function. This makes activities of daily life more difficult and they may feel uncertain about their future. Combined vision and hearing impairment also impacts on communication and the ability to keep in touch with friends and family. Lack of confidence in going out independently leads to lack of physical activity, withdrawing from social activities and reduced interaction with others, increasing the risk of other physical and mental health issues.

This booklet offers guidance and an understanding of the effects and impact of living with combined vision and hearing impairment.

Recognising the early signs of combined vision and hearing impairment is an important step towards proactively supporting people to regain their confidence and independence.

This booklet offers guidance and an understanding of the effects and impact of living with combined vision and hearing impairment, together with some practical suggestions and resources to consider to improve the lives of people experiencing this dual sensory disability. Information in this booklet is equally relevant for those living in aged care facilities as those living at home.

Combined vision and hearing impairment is more common than you may think. A study commissioned by Senses Australia reported that nearly 100,000 individuals were living in Australia with both a vision and hearing impairment, with 67% of those identified in the study over the age of 75 years (Dyke, 2013).

Schneider et al. (2012), in an Australian study, reported a prevalence of 6% within a sample of 1,972 individuals with dual sensory impairment over the age of 55, with this increasing to 27% in those aged 80 or older.

Studies have revealed individuals with combined vision and hearing impairment are likely to have additional health issues in comparison to those with no impairment, or a single sensory impairment including:

- Poorer mobility, increased number of falls, more hip fractures and, increased incidence of osteoporosis, stroke, heart disease and arthritis (Crews & Campbell, 2004).
- Reduced memory and increased states of confusion (Brennen, Horowitz & Su, 2005).
- Social inactivity (Viljanen, Tormakangas, Vestergaard & Andersen-Ranberg, 2014).
- Increased mortality rates of 1.6 to more than three times for individuals who have a combined vision and hearing impairment (Lam, et al., 2006; Appollonio, et al., 1995; Gopinath, et al., 2013).

Combined vision and hearing impairment is more common than you may think.



Vision Impairment

Eye conditions affecting the older population

A normal healthy eye receives images on the retina at the back of the eye. Those images are transmitted via the optic nerve to the brain enabling us to see clearly.

Diseases of the eye have different effects on the vision with cataract, age-related macular degeneration, glaucoma and diabetic retinopathy being the more common eye conditions causing vision impairment in older Australians. The effects of each condition impacts on functional abilities differently.

Visual function can fluctuate depending on lighting, contrast or fatigue and affect an individual's ability to communicate or carry out everyday tasks. Individuals will vary in the way they adapt to the impact of vision impairment. Functional vision will depend on a number of factors, such as changing light conditions, the time of day, a person's health, emotions, medication and fatigue.

It is important for anyone over the age of 65 years to have an annual eye test with an optometrist to identify any potential disease that could affect sight. An optometrist may recommend a referral to an ophthalmologist for diagnosis and ongoing management of an eye condition. Some eye conditions can be treated or stabilised if detected early.



Normal, healthy vision.

Cataract

The lens of the eye focuses light rays onto the retina. An opaque or cloudy lens is referred to as a cataract. Cataracts can result in blurred vision, glare, reduced night vision and reduced colour vision.

One or both eyes can be affected by a cataract usually developing slowly with gradual onset of blurred vision. Each person's vision will be affected differently by cataract. As the cataract develops, some may experience severe discomfort from glare, double vision, lack of clarity of colours or difficulty distinguishing contrasting shades. Cataracts may cause difficulty reading small print, recognising faces, orienting to new environments and locating objects.

Cataract is the primary cause (40%) of cases of vision impairment in Australians over the age of 55 and nearly 1.5 million of these individuals had untreated cataract in 2004, which represents 31% of that age group (Australian Institute of Health and Welfare, 2005).

Without treatment an advanced cataract will result in a person having a significant vision impairment and potentially legal blindness affecting quality of life and increasing the risk of injury and falls.

Treatment of a cataract involves a surgical procedure to remove the lens and implant a clear artificial lens known as an intraocular lens. The decision for surgery will be dependent upon the person's general health and the health of the eye.

For more information see:

www.healthdirect.gov.au/cataracts



Cataract causing blurred vision.

Macular Degeneration

The macula is a small area in the centre of the retina at the back of the eye. The macula is the area of the retina responsible for central vision giving us fine detail and colour vision. “Macular degeneration is the leading cause of legal blindness in Australia” (Macular Degeneration Foundation Australia).

There are two types of macular degeneration – dry and wet. There is no cure or treatment for dry macular degeneration caused by deposits under the macula breaking down the cells of the macula, damaging that area and gradually causing loss of central vision.

Wet macular degeneration can have a sudden onset caused by enlarged blood vessels leaking into the macula. While there is no cure for wet macular degeneration, if detected early, it may be possible to stabilise vision with treatment.

Macular degeneration causes distortion of vision with “blind spots” appearing in the central vision over time. Loss of central vision impacts on the ability to see fine detail required for everyday activities such as reading, recognising faces and driving.

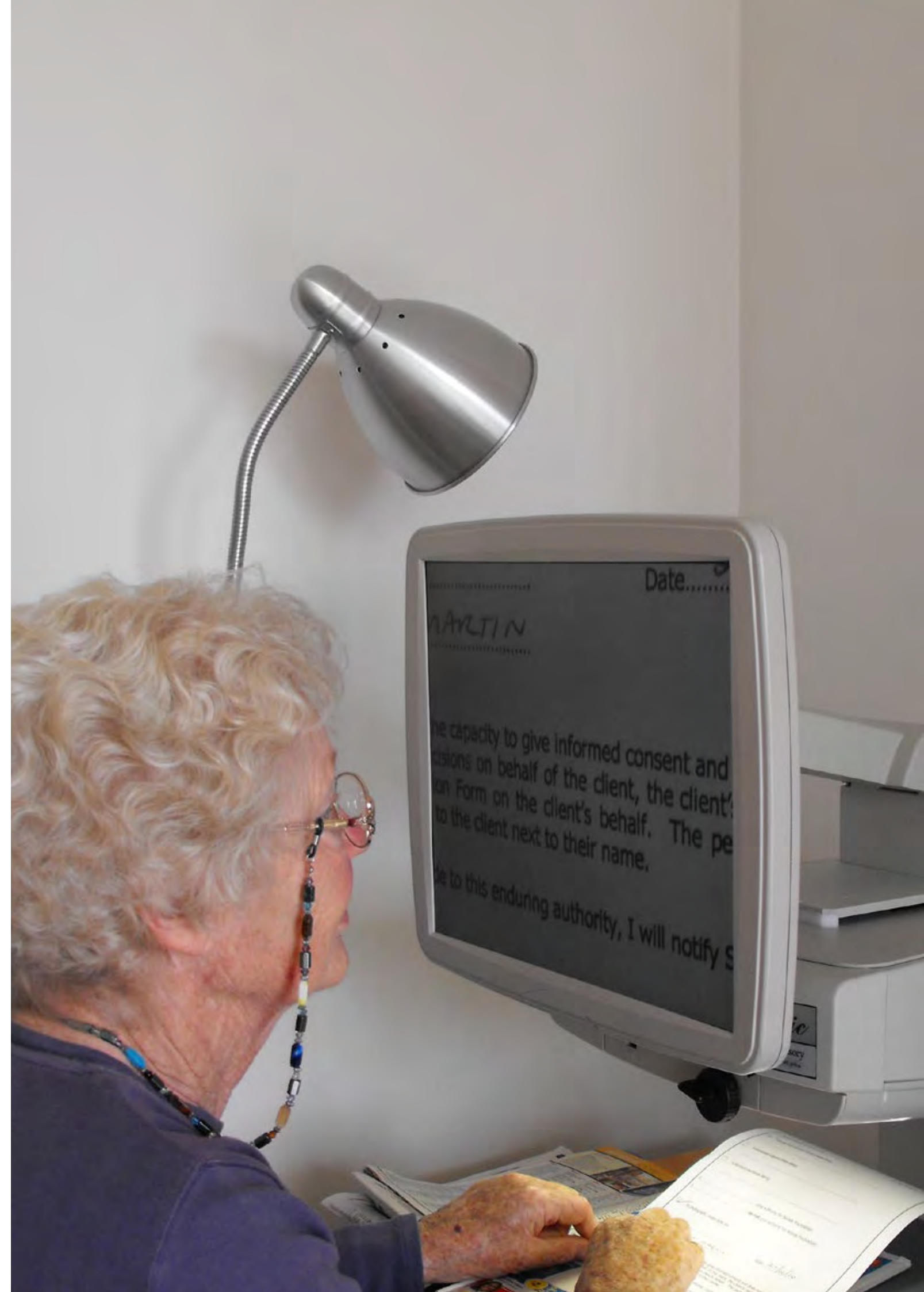
Usually macular degeneration does not affect peripheral vision unless there is an additional eye condition. However it is important to note that peripheral vision will not pick up as much detail as central vision. Learning to make use of residual peripheral vision can enable individuals to maintain independence.

For further information see:

www.mdfoundation.com.au



Macular Degeneration causes central vision loss.



Glaucoma

Glaucoma causes a slow deterioration of the optic nerve. Individuals are often unaware they have glaucoma as their peripheral vision slowly deteriorates. Detecting glaucoma early is important to prevent further progression as the damage is irreversible and, if left untreated can cause total blindness.

There is no cure for glaucoma, however if detected early and treated, it is possible to stabilise the condition and slow down its progression.

Peripheral vision impairment often referred to as “tunnel vision” affects mobility with an increased risk of falls and causes night blindness.

Around 300,000 Australians have glaucoma and while glaucoma affects individuals of any age, the incidence increases to one in eight for Australians over the age of 80 (Glaucoma Australia).

In 2004, 14,100 Australians over the age of 65 had glaucoma (Australian Institute of Health and Welfare, 2005).

For further information see:

www.glaucoma.org.au



Glaucoma causes peripheral vision loss.

Diabetic Retinopathy

Diabetic retinopathy is associated with both diabetes types 1 and 2. The risk of developing vision impairment is 25 times higher for individuals with diabetes.

Diabetic retinopathy is a progressive eye disease that affects both eyes with haemorrhaging of the blood vessels on the retina. If left untreated diabetic retinopathy can lead to significant vision impairment. With no early warning symptoms of vision impairment, it is important that individuals with diabetes have regular eye checks.

Blurred and patchy vision affects an individual's ability to carry out everyday tasks and activities. Getting out and about safely is also difficult, having an effect on a person's independence. For some people it can be frustrating and tiring when constantly making adjustments with the distortion of patchy vision.

Interestingly studies have shown that for people with diabetes there is also an increased risk of developing sensorineural hearing impairment (Australian Hearing, 2017).

For more information see:

www.diabetesaustralia.com.au



Diabetic Retinopathy causes blurred and/or patchy vision.

Charles Bonnet Syndrome

Charles Bonnet Syndrome does not cause vision impairment, but is a condition affecting people with vision impairment and causes visual hallucinations that can be distressing for the person experiencing them.

For further information see:

www.charlesbonnetsyndrome.org

A speech pathologist or occupational therapist can provide strategies to people with visual processing issues to improve function.

Visual processing issues

In the aged population where there is no evidence of abnormalities or damage within the structure of the eye, a person may have interruption or damage to the visual pathways within the brain as a result of trauma, stroke, a neurological condition, or dementia.

Damage to the visual pathway will disrupt processing and affect how and what an individual is able to see. This may include visual neglect (not paying attention to some parts of their visual field), or not recognising common objects or familiar faces.

Patience will be necessary when supporting a person who has visual processing difficulties as there may be a delayed response when communicating and organising daily activities.

A speech pathologist or occupational therapist can provide strategies to people with visual processing issues to improve function. They can also provide information on how best to support an older person with visual processing difficulties.



Hearing Impairment

Hearing impairment affects an individual's communication and access to information. Any damage or limitation to the functioning of one or more parts of the ear and/or the auditory pathways within the brain will result in varying degrees of hearing impairment.

Types of hearing impairment

Conductive hearing loss – is caused by problems with sound travelling through the outer or middle ear to the inner ear where sound is processed. Conductive hearing loss could be caused by a build-up of wax in the ear canal. Other causes might be in the middle ear such as a perforated ear drum or fluid in the middle ear.

Sensorineural hearing loss – results from damage to the cochlea and/or the auditory nerve affecting the ability to process sound.

Mixed hearing loss – a combination of both conductive and sensorineural hearing impairment.

Causes of hearing impairment

Common conditions affecting the hearing of older people include Meniere's Disease, tinnitus, noise induced sensorineural hearing loss and presbycusis.

Meniere's disease

Around one in 500 people are estimated to have Meniere's disease causing progressive sensorineural hearing loss and balance disorders. Symptoms of Meniere's disease include vertigo causing dizziness, nausea, vomiting and unsteadiness. Tinnitus, ringing or buzzing sounds in the ear, is a condition also associated with Meniere's.

Meniere's disease is not curable. People who have the condition can seek support to help them understand and control the symptoms using treatments such as medication, changing diet, balance training or learning relaxation techniques.

For more information see:

www.whirledfoundation.org

Tinnitus

Tinnitus is the experience of ringing, buzzing in the ears or head and affects around 18 % of Australians at some stage in their lives.

There are numerous causes of tinnitus symptoms, such as build-up of wax in the ear canal, otosclerosis, Meniere's disease or noise exposure. Other causes can be stress, fatigue or side effects of medication.

Learning relaxation techniques may help to minimise the effects of tinnitus.

For more information see:

www.tinnitus.asn.au.

Noise induced hearing loss

Prolonged or repeated exposure to loud noise, above 85 decibels, in the workplace or everyday life causes risk of damage to hearing. Hearing can also be permanently damaged by sudden exposure to loud noise rupturing the ear drum.

Approximately 37 % of Australians have some form of hearing loss caused by exposure to loud noise, which is one of the most significant single causes of hearing loss in Australia (Australian Hearing).

18%

of Australians will be affected by tinnitus at some stage in their life.



Approximately 37% of Australians have some form of hearing loss caused by exposure to loud noise – one of the most significant single causes of hearing loss in Australia.

Presbycusis

Presbycusis is a common sensorineural hearing disorder associated with the ageing process whereby the nerve cells in the cochlea have been damaged causing a gradual deterioration of hearing.

Presbycusis affects between 30-40 % of adults over 65 years of age affecting the ability to hear high pitched sounds, making communication difficult, especially in group situations.

Often with this condition a person will find it easier to hear lower frequency sounds such as a male voice compared with the higher pitched voice of a woman.

Amplification with hearing aids or listening devices can improve hearing for some individuals. Others may benefit from a cochlear implant or other surgical procedures.

Auditory processing issues

In the aged population where there is no evidence of abnormalities or damage within the structure of the ear, a person may have interruption or damage to the auditory pathways within the brain as a result of trauma, stroke, a neurological condition, or dementia.

A person with damage to the auditory pathway resulting in difficulties processing what they hear, may experience difficulty understanding speech.

Patience will be necessary when supporting a person who has auditory processing difficulties as there may be a delayed response when communicating and challenges organising daily activities.

A speech pathologist can work with people with auditory processing issues to improve their function. They can also provide information on how best to support an older person with auditory processing difficulties. This may include use of pictures, or object symbols to support understanding.

The case study on the following pages identifies some early signs of combined vision and hearing impairment.



Jack's story

Jack, 72 years of age, has been living in a retirement village for 5 years. Staff observed that Jack seems to be finding it difficult to care for himself. His clothes are dishevelled and stained and he is not eating well. Once an active, proud man, he attended many of the activities both in the village environment and out in the community with his late wife. Jack has now withdrawn from social events and has very little communication with those around him.



Reduced self-confidence and the inability to access their local community independently may lead to withdrawal from physical and/or social activities, resulting in feelings of isolation. Studies have shown that isolation leading to depression is at a higher rate among people who are deafblind or who have a combined vision and hearing impairment, compared to those without sensory impairment.


Degree of Hearing Impairment

The extent of hearing impairment will depend partly on the pitch (frequency) of sounds an individual is able to hear impacting on their ability to determine speech and communicate effectively. Hearing is measured in decibels (dB) or the loudness of sounds/noises.


The auditory process is complex. We can never assume that because a person can hear some sounds that they can hear everything, even with a hearing aid.

It is important that individuals over the age of 65 have their hearing tested annually by an audiologist to detect hearing impairment early so it can be addressed.

i Given the following levels of hearing impairment, the additional sensory loss of vision impacts on the ability to gain information from body language, lip reading or any other visual cues in conversation. Other methods of communication may need to be considered such as large print, written conversation or tactile communication.




Hearing within the normal range
0 to 20 dB




Mild hearing loss
21 to 40 dB


- Difficulty hearing softer sounds/speech
- Difficulty hearing and understanding conversation with background noise or in loud environments
- Hearing clear speech may be possible in a quiet environment
- A hearing aid or listening device may provide a solution in conversations




Moderate hearing loss
41 to 60 dB




- Inability to hear soft and moderately loud sounds
- Difficulty hearing conversations and even more difficult with background noise
- Needing the television or radio turned up
- A hearing aid can assist with conversations where speech is clear and there is minimal background noise




Severe hearing loss
61 to 80 dB




- Amplification from a hearing aid may assist
- Without a hearing aid there will be difficulty hearing speech
- More effort required by individuals to listen to conversation
- Majority of a conversation missed particularly in group situations or where there is background noise




Severe to profound hearing loss
81 to 90 dB




- Unable to hear speech
- Hearing aids unlikely to be adequate for conversation
- A cochlear implant may be recommended
- Adapting through use of lip reading or visual cues may assist in understanding speech



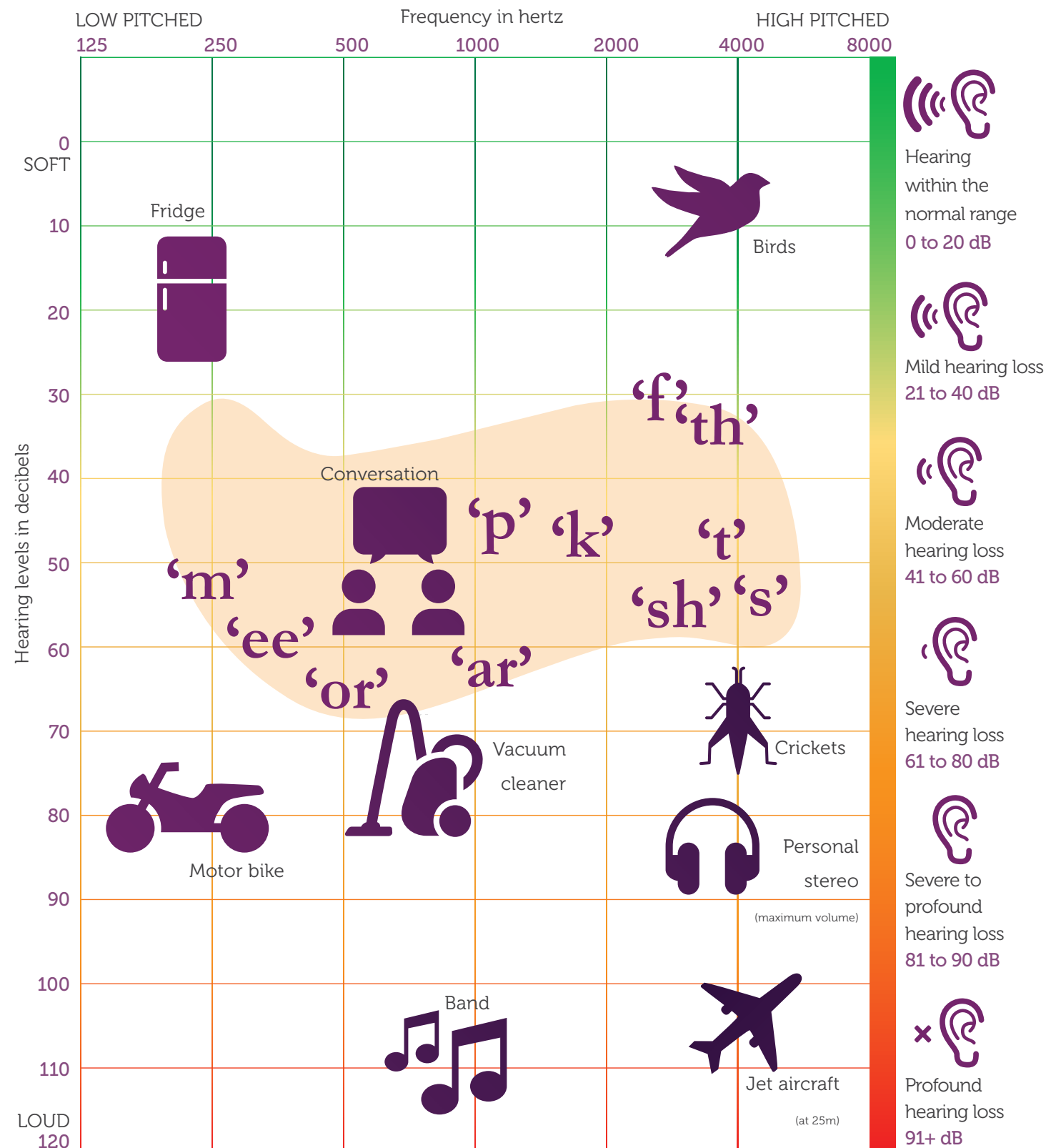
Profound hearing loss
91+ dB



- Inability to hear speech
- May be able to hear loud environmental noises
- Hearing aids may or may not be beneficial
- Clear speech and face to face communication using lip reading or visual cues may assist communication



See below diagram for information about the types of sounds that will be missed with different levels of hearing impairment.



Other health related issues associated with ageing

Deterioration of vision and hearing are just two of the common effects of ageing. Other issues associated with ageing include:

- Physical frailty
 - Arthritis
 - Hypertension
 - Greater risk of stroke and progressive neurological disorders
 - Diabetes
 - Dementia
- It is important to always consider every individual holistically and look at how the above factors may be interacting and influencing each other.

Early signs of combined vision and hearing impairment. Common signs of deteriorating vision and hearing include:

- Turning the radio up loud
- Complaining that people are mumbling
- Accidentally walking into objects or tripping on steps
- Sitting near the window to read
- Turning up the television volume
- Repeatedly asking for repetition during conversation
- Withdrawing from social situations
- Appearing clumsy
- Increased falls
- Complaining of glare

Vision and hearing issues in Aboriginal & Torres Strait Island communities

While not age related, it is important to note that Aboriginal and Torres Strait Island (ATSI) communities in Australia have a higher incidence of combined vision and hearing impairment than the rest of the Australian population. This is due to increased prevalence of otitis media, trachoma and conjunctivitis, all of which can cause life-long sensory impairments.

Otitis media, more commonly referred to as middle ear infection, can cause hearing loss and if untreated can cause permanent hearing loss. “Some Indigenous communities have a prevalence of chronic suppurative otitis media up to 10 times higher than the 4% that the World Health Organization (WHO) identifies as being ‘a massive public health problem’ requiring ‘urgent attention’” (Burns & Thompson, 2013).

It has also been reported that blindness occurred up to 10 times more often in the Aboriginal and Torres Strait Islander population than in the non-indigenous population (Taylor, 1997). Common causes of vision problems in indigenous communities include diabetes, cataract, trachoma and conjunctivitis. Trachoma and conjunctivitis are both infections which affect the eyes.

When working with older Aboriginal and Torres Strait Islanders, it is important to be mindful that incidence of combined vision and hearing impairments will be higher than non-indigenous populations. Addressing the needs associated with combined vision and hearing impairments should be undertaken in a culturally sensitive way, bearing in mind this may differ considerably from approaches recommended in this booklet.



Jack's story

Staff have been aware of Jack's hearing impairment since he moved to the village. Jack's hearing deteriorated due to noise damage when he worked in a factory in his younger years. He wears bilateral hearing aids and his left ear has always been better for communication.

In conversations now, Jack often seems confused, responding to conversations out of context or nodding without appearing to understand. Staff suspect he has not always understood what they are saying. Jack's wife often used to repeat conversations if she thought he had misunderstood.



Adapting to the use of hearing aids and other strategies may improve communication. For some, that improvement can be short lived when a further deterioration of hearing impacts on their ability to communicate. Relying on vision to communicate is then restricted with the onset of vision impairment. Re-adjusting to these major life changes can be an emotional experience for the person, and those supporting them, affecting confidence in all aspects of daily life.

Impact of combined vision & hearing impairment, including strategies to address these.

Psychosocial Impact

Reduced self-confidence and difficulty accessing the local community independently may lead to withdrawal from physical and social activities resulting in isolation, loneliness and depression.

For many older people, having led a full and active life, the onset of deteriorating vision and hearing leaves them with an uncertain future and difficulties dealing with everyday tasks previously carried out with ease.

Many older people are adjusting to other life changes such as deteriorating health, physical decline and grief from loss of loved ones or finding themselves in a caring role unexpectedly.

A decline of vision and hearing can further add to feelings of frustration, having to continuously readjust to changing circumstances.

Given the complexity of combined vision and hearing impairment alongside other life changes associated with ageing it is not surprising that people are affected by depression and for some more severe mental health issues.

Referral to a social worker or counsellor can be very beneficial to explore local options for community participation and engagement. A social worker or counsellor can also support a person to process grief and loss associated with combined vision and hearing impairment and other losses associated with ageing.

It is important to find service providers who have an understanding of sensory impairment and how this impacts on both physical and psychosocial functioning. See the end of this booklet for a list of service providers who work specifically with people with sensory impairments.



Communication

All people with combined vision and hearing impairment experience some degree of difficulty with communication. This can be exacerbated in noisy environments or environments with dim lighting or glare. The following outlines some simple strategies and techniques which can significantly improve communication for people with combined vision and hearing impairment.

Adapting the environment for better communication

- Ensure light sources are not directed to the face of the person with dual sensory loss.
- Minimise background noise by shutting doors and windows and turning off TVs and radios.
- Be aware of acoustics. Soft furnishings and carpeting will absorb sound reducing echo and making it easier to hear.



Never assume a person will hear everything because they have a hearing aid. It may take time to adjust to wearing a hearing aid. Perseverance and wearing the hearing aid for short periods during the day will help the brain adjust gradually to different environments. The person may need to practice using the different features of a hearing aid and discuss any changes required to the program settings with an audiologist.

Approaching and interacting

1. Approach

The person may NOT know you are there...

- Approach from the front or in their line of vision.
- Approaching from behind may startle the person.
- Say hello and say the person's name so they know you are speaking to them and not someone else.
- Say your name e.g. "Hello Jack, it's Tom here."

2. Make contact

You may need to gain the person's attention

- By touching their arm or shoulder.
- Leave your hand on their shoulder until acknowledged.
- Do not take control by tapping the person repeatedly, grabbing hold of or taking their hand or arm.

The person may need to finish what they are doing before acknowledging you.

3. Interact

Determine whether the person will be relying more on their vision or hearing.

- If the person has some vision they may rely on lip reading, visual sign, and visual cues.
- Where vision restricts ability to use visual cues, you may need to establish whether the person's better hearing is on the left or right and sit on that side.
- Establish a comfortable distance for effective communication. You may need to sit closer than usual so the person can see and hear you.
- Keep your hands clear of your face and keep your face visible at all times.
- Speak a little slower than usual maintaining rhythm of speech.
- Speak clearly, without shouting.
- Allow time to process information.
- Be clear of the subject you are talking about. Let the person know if you are changing the subject.
- Repeat and rephrase if communication breakdown occurs.
- A person's nod or smile does not necessarily mean they have understood you.
- Prolonged concentration may cause fatigue, so it can be good to stop for a break.

Access to printed information

Facilitate access to information through the person's preferred format

- Large print
- Audio
- Braille
- Sign language interpreter
- Captioned or signed DVD

Amplification

Hearing aids amplify sound in everyday situations such as watching television; one to one conversations and using the telephone. People often become frustrated and may take some time to adjust to wearing a hearing aid and may need encouragement. Some hearing aids have a digital program that may need some adjustment by an audiologist for use in social situations or where there is background noise.

Another reason a person may stop using their hearing aids could be limited vision causing difficulty replacing the hearing aid batteries. If required, it is important to add to care plans that support is needed to change batteries and clean hearing aids.

There are a number of loop systems available that can be used within the home with audio equipment such as a radio or television. Some specialist telephones are fitted with an induction loop that can increase clarity and amplification during conversations.

Assistive listening devices

There are a range of assistive listening devices available that can support communication. These devices may work with or without a hearing aid to amplify sound. These devices will not be a solution for everyone. It is therefore advisable to seek advice from an audiologist or speech pathologist.

- i** Many public buildings will display this symbol which indicates there is an inductive loop system to aid communication. A hearing aid fitted with a telecoil ('T' setting) will receive a message directly, cutting down background noise and may give more clarity of sound.



Jack's story

Jack's children visited him regularly. They were becoming increasingly concerned about his ability to cope. They felt Jack was vulnerable with reduced vision and hearing, discussing with him the option of transitioning into the aged care facility where he would receive more support.

Jack felt even more inadequate. Jack was also grieving the loss of his wife and had not realised just how much she supported him in social situations. Jack lacked confidence going out independently.



For many older people, the lack of physical activity and social interaction becomes a risk factor for other physical and mental health issues.

Depending on the circumstances, rather than being reactive and encouraging a move into an unfamiliar environment, a proactive approach to supporting people with combined vision and hearing impairment can improve confidence and independence.

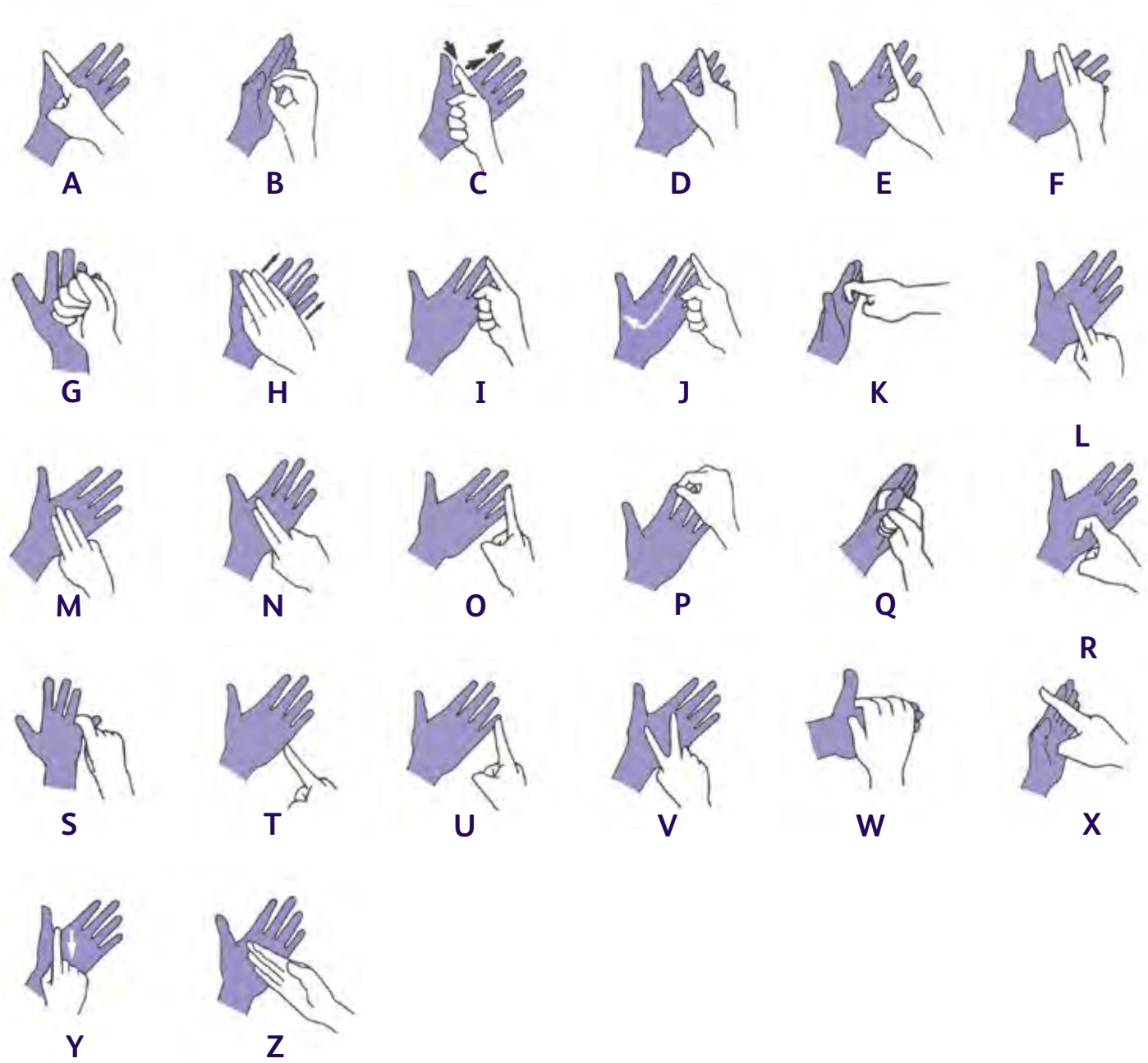
Tactile Communication

Tactile communication such as block alphabet, or the deafblind alphabet may need to be considered when vision and/or hearing are insufficient for communication using speech.

Even if a person can hear speech in quiet environments, using tactile communication methods can be helpful in noisy environments or if the person is having difficulty hearing specific words.

See the following diagrams for the deafblind fingerspelling alphabet and the block alphabet.

Deafblind Alphabet



Block Alphabet



Getting Around

Combined vision and hearing impairment can make it difficult for a person to orient to their surroundings and move about safely in both indoor and outdoor environments. There are a number of strategies which can help a person feel safe and move about independently.

Strategies to support older people with combined vision and hearing impairment to get around safely include:

- Referral to a qualified orientation and mobility specialist who can assess the individual's abilities and needs and devise strategies to best support the individual in maintaining or regaining independence. This may include the introduction of a mobility aid such as a long cane, advice and guidance about moving around safely and providing information on other mobility devices and apps.
- Orient the person by letting them know who and what is in their immediate environment and landmarks which will help them to orient themselves in the future.
- Ensure pathways are kept clear of clutter and obstacles for ease of physical access.
- Ensure high contrast on steps and other hazards.
- High contrast edging around doors and windows will also help a person with low vision to orient themselves.
- Guiding is a technique used when a person with combined vision and hearing impairment is new to an area, or if they will have difficulty navigating independently.
 - Let the person know you are there by offering your arm for guiding.
 - Place the back of your hand against the back of the person's hand so they can find your arm.
 - Walk one step ahead of the person you are guiding.

High contrast edging around doors and windows will also help a person with low vision to orient themselves.



Jack's story

Jack's family sought specialist advice regarding Jack's combined vision and hearing impairments from a variety of professionals with the following outcomes:

- Deafblind consultant - referred to, and liaised with social worker, orthoptist, occupational therapist, audiologist, speech pathologist, and orientation and mobility specialist. Arranged for an alert system to be fitted in Jack's home. With a vibrating pager, Jack was alerted to the doorbell, alarm clock, phone ringing and activation of the smoke alarm. Jack is now alerted to the doorbell when his meals are delivered.
- Social worker - linked to peer support group, grief counselling, and a weekly volunteer visitor.
- Orthoptist - made recommendations about use of a hand-held magnifier for reading and close tasks. Additional lighting and contrast was recommended to improve Jack's safety and functioning in the kitchen.
- Orientation and mobility specialist - taught Jack strategies for getting around safely indoors and outside his home.
- Occupational therapist - taught Jack skills to remain independent in the home including organising his food so he could identify what it was and whether or not it was out of date, organising his laundry, and identifying his clothing. Staff agreed to discreetly let Jack know if he had a stain on his clothing or mismatched socks, restoring pride in his appearance.
- Audiologist - adjusted Jack's digital hearing aid so he could use a loop system in the activity room improving communication.
- Speech pathologist - taught Jack and his children strategies to minimise and repair communication breakdown.

A simple device such as a liquid level indicator that vibrates before liquid reaches the top of a cup meant Jack could make his own drinks without scalding himself.





Balance

Our vision provides us with a sense of balance as we move about in the environment.

The vestibular system which is responsible for our balance, direction and spatial orientation, forms part of the auditory system. A number of conditions that cause hearing impairment can also affect the vestibular system.

Balance may be affected with a combined vision and hearing impairment.

Activities of daily living

There are many activities which become difficult with a combined vision and hearing loss, however with support from trained professionals and sometimes a little creativity, there are often ways around the barriers to performing routine and preferred activities. Strategies which may assist include:

- Referring to an occupational therapist with skills and experience in working with people with vision and hearing loss.
- Add high contrast or tactile markers to controls on household appliances such as microwaves, washing machines and dryers.
- Add large print, tactile or audible labels to tinned and bottled food items and medication.
- Install a tactile alert system for detecting the doorbell, telephone, and fire alarm.

Jack's Story



Jack's story

Staff observed that Jack had become clumsy, knocking over his drinks and bumping into furniture when he was in the main communal area of the village, and on a couple of occasions Jack had almost fallen. Family noticed his home was untidy with food that was either stale or out-of-date stored in cupboards and the fridge.

Jack's GP referred him to an ophthalmologist where an examination revealed his vision was affected by macular degeneration.

Jack had previously been able to "get by" in a conversation using a combination of residual hearing, lip reading and observing body language. Macular degeneration had a significant impact on his ability to communicate. Jack was no longer able to rely on the additional feedback he received through visual communication. Jack began to regain confidence as he developed more skills to manage day to day tasks and regained motivation to interact with others.



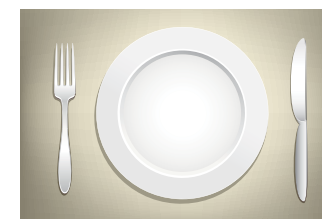
Vision impairment restricts the ability to identify familiar faces and the ability to lip-read, often leading to withdrawal from situations where conversation is expected.



Big button telephones with features such as high contrast, large print, increased amplification, visual and extra loud alerts keeps Jack in contact with friends and family.



Using a contrasting coloured non-slip placemat would make the plate and cutlery easier to locate.



For a person with low vision this plate and cutlery would blend into the background.

While some items of equipment are mentioned in this case study, for a more comprehensive list of equipment available for people with combined vision and hearing impairment see www.deafblindinformation.org.au.

See also, final section in this booklet for list of equipment suppliers.



Top Tips

1. Seek assistance

It is often assumed that vision and hearing loss are part of getting older and therefore nothing can be done and the impacts of these losses simply need to be accepted. There are many strategies and increasing numbers of devices which can assist. Seek assistance from professionals skilled in working with people with sensory loss.

2. Be patient

Dual sensory loss can be frustrating for both people with the impairments and those around them. Many activities including communication can take longer. It is important to be aware that things will be slower and take longer, so more time needs to be allowed.

3. Make the effort

While many activities including communication are more difficult with a combined vision and hearing impairment, it is important to make the effort to support and encourage older people and persevere with difficult communication. This will support and foster the individual's sense of self and identity and reduce isolation which is a common result of dual sensory impairment.

4. Be creative

While many tasks become more difficult with a combined vision and hearing impairment, there can often be creative ways to get around these problems. Enlist the support of a volunteer to provide guidance at an exercise class, or support a person with any aspects they now find difficult, for example a preferred hobby such as knitting.

Useful Contacts (Accurate at time of publication)

Advocacy and Information

Blind Citizens Australia

Website: www.bca.org.au
 Email: bca@bca.org.au
 Toll free: 1800 033 660
 Tel: (03) 9654 1400
 Fax: (03) 9650 3200

Council On The Ageing (COTA)

Website: www.cota.org.au
 Email: cota@cota.org.au
 Phone: (02) 6154 9740

Deaf Australia Inc.

Website: www.deafaustalia.org.au
 Email: info@deafaustalia.org.au
 Fax: (03) 8691 1324

Deafblind Australia

(formerly Australian Deafblind Council)
 Website: www.deafblind.org.au
 Email: info@deafblind.org.au
 Tel: 0427 006 890 (SMS/Voice)

Deafblind Association (NSW)

Website: www.dbansw.org.au
 Email: dbansw1@bigpond.com
 Mobile: 0432 570 210 (SMS/Voice)

Deafblind Victorians (Vic)

Website: deafblindadvocacy.wordpress.com
 Email: deafblindadvocacy@gmail.com

Deafblind West Australians (WA)

Website: www.dbwa.org.au
 Email: info@dbwa.org.au

Deafness Forum of Australia

Website: www.deafnessforum.org.au
 Email: Submit enquiry online

Service Providers

National

Australian Hearing

Website: www.hearing.com.au
 Email: Submit enquiry online
 Tel: 1300 412 512

Better Hearing Australia

Website: betterhearingaustralia.org.au
 Email: info@bhabrisbane.org.au
 Tel: (07) 3844 5065
 Fax: (07) 3846 5260

Guide Dogs Australia

Website: www.guidedogsqld.com.au
 Toll free: 1800 484 333

Independent Living Centres, Australia

Website: www.ilcaustralia.org
 Tel: 1300 885 886

National Relay Service

Website: www.relayservice.gov.au
 Email: helpdesk@relayservice.com.au
 Voice freecall: 1800 555 660
 Internet relay: 1800 555 660
 Tel: 133 677
 Speak / Listen: 1300 555 727
 Fax freecall: 1800 555 690
 SMS: 0423 677 767

Royal Society for the Blind

Website: www.rsb.org.au
 Email: Submit enquiry online
 Tel: (08) 8417 5599
 Toll free: 1800 675 554

Seeing Eye Dogs Australia

Website: www.seda.visionaustralia.org
 Email: info@seda.org.au
 Tel: 1800 037 773

Vision Australia

Website: www.visionaustralia.org
 Email: info@visionaustralia.org
 Tel: 1300 847 466
 Fax: 1300 847 329

ACT

Canberra Blind Society

Website: www.canberrablindsociety.org.au
 Email: Submit enquiry online
 Tel: (02) 6247 4850
 Fax: (02) 6247 2927

ACT Deafness Resource Centre

Website: www.actdrc.org.au
 Email: Submit enquiry online
 Tel: (02) 6287 4393

New South Wales

Deaf Society NSW

Website: www.deafsocietynsw.org.au
 Email: Submit enquiry online
 Tel: 1800 893 855
 Skype: The Deaf Society
 SMS: 0427 741 420

Northern Territory

DeafNT

Website: www.deafnt.org.au
 Email: info@deafnt.org.au
 Tel/Fax: (08) 8945 2016
 SMS: 0429 452 016

Queensland

Queensland Blind Association Inc

Website: www.qba.asn.au
 Email: qba@qba.asn.au
 Toll free: 1800 753 253 (Qld regional only)
 Tel: (07) 3848 8888
 Fax: (07) 3848 6989

Deaf Services Queensland

Website: www.deafrservicesqld.org.au
 Tel: (07) 3892 8500
 Fax: (07) 3892 8511

Victoria

Able Australia

Website: www.ableaustralia.org.au
 Email: info@ableaustralia.org.au
 Tel: 1300 225 369
 Fax: (03) 9836 1510

VicDeaf

Website: www.vicdeaf.com.au
 Email: info@vicdeaf.com.au
 Tel: (03) 9473 1111
 Fax: (03) 9473 1122

Tasmania

Tasmanian Deaf Society

Website: www.tasdeaf.org.au
 Email: info@tasdeaf.org.au
 Tel: (03) 6228 1955
 Fax: (03) 6228 1966
 Skype: Tasdeaf2016
 SMS: 0418 341 373

Western Australia

Senses Australia

Website: www.senses.org.au
 Email: Submit enquiry online
 Tel: 1300 111 881
 Tel: (08) 9473 5400
 Fax: (08) 9473 5499

WA Deaf Society

Website: www.wadeaf.org.au
 Email: wadeaf@wadeaf.org.au
 Tel: (08) 9441 2677
 Fax: (08) 9441 2616

VisAbility

Website: www.visability.com.au
 Email: info@visability.com.au
 Tel: (08) 9311 8202
 Toll free: 1800 847 466
 Fax: (08) 9361 8696

Equipment Suppliers

Please note, many organisations who provide specialist services to people with vision and / or hearing impairments also sell equipment. Please also check websites of the services listed above or ask about aids and equipment when you are speaking with these services.

Vision aids and equipment

Humanware

Website: humanware.com/en-australia
 Email: au.sales@humanware.com
 Tel: (02) 9686 2600
 Fax: (02) 9686 2855

Optek Systems

Website: www.opteksystems.com.au
 Email: opteksystems@bigpond.com
 Tel: (02) 9680 0600
 Mobile: 0409 228 941
 Fax: (02) 9880 0611

Pacific Vision

Website: www.lowvision.com.au
 Email: office@pacificvision.com.au
 Toll free: 1800 756 849

Quantum Reading Learning Vision

Website: www.quantumrlv.com.au
 Email: info@quantumrlv.com.au
 Tel: (02) 9479 3100
 Fax: (02) 9875 1646

Visitech Magnifiers

(Australian distributor for Enhanced Vision, USA)
 Website: www.enhancedvision.com
 Email: s_griffin_visitech@bigpond.com
 Tel: (02) 4971 5581

Hearing equipment and devices

ACT Deafness Resource Centre

Website: www.actdrc.org.au
 Email: Submit enquiry online
 Tel: (02) 6287 4393

ALDS Australia

(Assistive Listening Device Systems)

Website: www.aldsaustralia.com.au
 Tel: Submit enquiry online

Connect Hearing

Website: www.connecthearing.com.au
 Tel: 1300 362 231

Homewatch Security Services

Website: homewatchsecurity.com.au
 Email: info@homewatchsecurity.com.au
 Tel: (07) 3801 4190
 Fax: (07) 3806 1533
 Mob: 0411 380 141

Independent Living Systems (Watchdog Alarms)

Website: www.watchdogalarms.com.au
 Email: sales@watchdogalarms.com.au
 Tel: 1300 123 400
 Mobile: 0432 002 002

Oricom International

Website: www.oricom.com.au
 Email: support@oricom.com.au
 Tel: 1300 889 785 OR
 (02) 4574 8888
 Fax: (02) 4574 8898

Phoenix Hearing Instruments

Website: www.phoenixhearing.com.au
 Email: bjc@phoenixhearing.com.au
 Tel: (07) 3852 4622
 Fax: (07) 3852 4633

Printacall Communications Technology

Website: www.printacall.com.au
 Email: sales@printacall.com.au
 Tel: (02) 9809 2392
 Fax: (02) 9809 2345

Word of Mouth Technology

Website: www.wom.com.au
 Email: info@wom.com.au
 Tel: (03) 9723 0660
 Fax: (03) 9723 9305

Vision, hearing and other aids

Daily Living Aids (DLA)

Website: www.dailylivingaids.net.au
 Email: Submit enquiry online
 Tel: 1300 788 239
 Tel: (02) 4677 0799
 Fax: (02) 4677 0722

Lions Low Vision Clinic

Royal Hobart Hospital, Tasmania

Website: www.dhhs.tas.gov.au
 Email: llvc@ths.tas.gov.au
 Tel: (03) 6166 0118
 Fax: (03) 6234 9454

Technical Solutions, Victoria

Website: www.tecsol.com.au
 Email: inquire@tecsol.com.au
 Tel: (03) 9737 9000
 Fax: (03) 9737 9111

Telstra

Website: telstra.com.au/aboutus/community-environment/community-programs/disability/disability-equipment-program
 Email: Submit enquiry online
 Toll free: 1800 068 424
 Fax: 1800 814 777 (Freefax)

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