People who are deaf are unable to discriminate speech through the ear and, therefore, cannot use hearing for communication.

People who have hearing impairment have some degree and type of auditory disorder. This fact sheet details communication strategies for both groups of people.

There will be vast differences in experience and needs between someone born deaf and someone who becomes deaf at the age of seven years. There will be differences for people who acquire hearing impairment gradually, as a result of a known degenerative condition, and those who lose their hearing suddenly and traumatically.

What is hearing?

Hearing occurs when sound waves are conducted to the nerves of the inner ear and, from there, to the brain.

Sounds vary in two ways.

- **Loudness** is how big the sound waves are and is measured in decibels (dB). A whisper is about 20dB and loud music can be anywhere from 80 to 120dB. Sounds greater than 85dB can cause hearing loss in just a few hours.

- **Pitch** is how fast the sound waves vibrate and is measured in cycles per second (cps) or Hertz (Hz). The sound of a bass drum is around 50cps, speech falls in the range 250cps to 4,000cps, while a shrill cry is around 10,000cps or higher. The normal range of human hearing is from 16cps to 16,000cps.

When hearing is tested, a person is asked to listen through headphones, one ear at a time, and indicate when they can hear sounds of different loudness and pitch. In this way, an audiogram is created which shows the characteristics of their hearing.

Many factors can disrupt the chain of events which allow hearing to occur.

**Conductive hearing loss** occurs when the tiny bones of the middle ear fail to conduct sound to the cochlea, or when the eardrum fails to vibrate. The hearing loss that results is usually mild to moderate.

**Nerve loss** happens when the hair cells of the cochlea or the auditory nerve are damaged. This loss is usually moderate to severe. It can occur because of pre-birth or birth related problems, and the impact of increasing age. Ninety per cent of nerve deafness is in people aged over 60.

**Central hearing loss** is caused by damage to the auditory areas of the brain, perhaps through an acquired brain injury.

Some people have **psychological hearing loss**, when there is no physical reason for the loss, but factors such as extreme stress cause them to stop hearing temporarily or permanently.
How hearing loss can affect people

The main effect of hearing loss is on understanding and producing speech. When a person loses their hearing before they learn to speak, their ability to learn speech is substantially reduced because they have not had the opportunity to hear others speak, imitate them and get feedback.

Even for those who learnt to speak before they lost their hearing, it can be very difficult to understand spoken conversations. They may be unable to hear particular sounds like ‘s’, ‘f’ and ‘t’ or not be able to filter out unwanted sounds. This makes it difficult to hear speech in noisy places. Most people who learn to lip read well can only pick up a certain percentage of speech sounds accurately through the shape of the mouth, and through the context of the discussion.

Many people who acquire hearing impairment when they are young learn to sign before they are taught to use spoken language or to write. This means that they learn to speak and write (whether in English or another language) as a second language. This can cause communication difficulties with hearing people. This is partly because Auslan, the sign language usually used in Australia, has a very different structure to spoken or written English.

Besides difficulties with communication, some other effects of hearing loss can include:

- problems in locating the direction that sounds are coming from
- sound distortion, making it difficult to appreciate music
- sensitivity to loud noises
- ringing in the ears (tinnitus)
- dizziness or loss of balance
- a sense of isolation – feeling cut off and left behind.

Advocating for and working with people who are deaf or have hearing impairment

Advocacy and disability employment services have a common aim, that being to assist and encourage people with disability to be self-determining, know their rights, be treated equally, be informed and make choices.

If your team, work group, or organisation includes people who are deaf or who have hearing impairment there are ways you, they and other team members can make sure they contribute effectively. This includes considering:

- communication
- safety
- how work and other areas are set up.

This sheet includes some strategies to approach each of these things. They may not be exactly right for your organisation because every person and every organisation is unique. Use them as a starting point for developing your own strategies that also take account of people’s skills and interests, their personalities and cultural background, and the work that the team is doing.
Strategies

Communication

1 Find out the person’s preferred means of communication. Some people with hearing impairment, particularly those who are deaf, will prefer to communicate by signing.

Auslan is the most common signing language in Australia. People from culturally and linguistically diverse backgrounds may prefer to use other signing languages.

It is great if others learn to sign, but use professional signing interpreters when they are needed – particularly in discussions about rights, employment plans, emergency procedures, etc.

2 Learn to assist the person to make the most effective use of the hearing they have and of hearing aids and lip-reading.

- Be sure you have the person’s attention before you speak. If they can’t see you, a tap on the arm is acceptable.
- Face the person. Don’t lower your head, turn away or walk away while you’re talking. This can reduce the volume of your voice.
- Announce the topic you want to discuss.
- If a person is lip-reading, don’t chew or put your hand over your mouth when you speak. This can distort the message.
- Insist on ‘one speaker at a time’ in a meeting. This includes the person who has hearing impairment.
- Make sure you don’t have strong light behind you (for example, from a window). This puts your face into shadow and makes lip-reading very difficult.
- Speak clearly, at a moderate pace.

- Don’t shout. This can distort sound for people who use hearing aids.
- Get to the point quickly. Don’t waffle. Remember that using hearing aids and lip-reading requires a lot of concentration and can be very tiring.
- Check that you have got the message across clearly. Be prepared to repeat words or phrases. If need be, say it a different way. Encourage the person to tell you when they have not understood you.
- Move somewhere quieter if the person is having trouble hearing or understanding.
- Consider using assistive technology like volume control phones at desks or hearing loops in meeting rooms. Contact the Australian Association of the Deaf (www.aad.org.au) or FaCSIA (www.facsia.gov.au) for information.

3 Think carefully before you use gestures and signs (other than a recognised sign language) to communicate.

Signs and gestures don’t always mean the same thing in every culture so be sure that the sign you are using is not offensive in the culture of the person you are communicating with.

4 Use written and visual material. For example, in meetings use notes, handouts and a written agenda; when you are talking about safety signs have one with you.

Ensure that written material you use is in an appropriate format and meets language and literacy needs.

5 Encourage other people to use communication strategies that effectively include the person with hearing impairment.

The cochlear implant assists people to hear by using a combination of an external microphone and speech processor and an implanted electronic package to directly stimulate the auditory nerve. The brain interprets this stimulation as sound, meaning that the person who has the implant may have useful hearing and be able to communicate more easily and effectively. Cochlear implants may assist people who are not helped by using hearing aids. Cochlear implants are not suitable for everyone. How much benefit each person gets from having a cochlear implant varies depending on the cause of their hearing loss and a number of other factors.
Safety

Some specific safety issues may arise for people with hearing impairment. Creating a safe environment is a shared responsibility. Find out from a person who is deaf or has hearing impairment what they need to be safe and feel safe, and check that they understand their responsibility to act and work safely.

1 Gather information about the person’s functional safety skills and review it regularly. For example, in the workplace:
   ◗ do they know and follow the safety regulations?
   ◗ do they know how to identify and report a hazard?
   ◗ are they able to perform emergency shut-downs of machinery etc?

2 Identify any procedures, activities or equipment/machinery that are hazardous for a person who is deaf or has hearing impairment.
   If possible eliminate the hazard. Alternatively, develop strategies to separate the person from the hazard.

3 Plan for emergencies.
   All staff of advocacy and disability employment services should be aware and up-to-date regarding their specific responsibilities to assist people who are deaf or have hearing impairment in an emergency.

Setting up work and other areas

Carefully analyse any need the person who is deaf or has hearing impairment may have for assistive equipment or modifications to their environment.

Could noise create problems for the person (for example, hearing questions or instructions)?

Are there appropriate visual substitutions for audible signals (for example, lights to signal an emergency evacuation)?

Does the person’s work area need modifications for safety or productivity reasons?

Is the lunchroom furniture arranged to be inclusive of everyone in it, to avoid possible social isolation?

Are interview rooms quiet and private, well lit, and equipped with any visual substitutions needed?

Sarah’s story

After five years in her current job, Sarah, who has had moderate hearing loss since she was a young child, is moving to a new work area. Sarah uses hearing aids which help her recognise some speech and she also lip-reads. She uses speech, although other people often find her hard to understand. The combination of childhood illness and her hearing loss disrupted Sarah’s education and she has problems with reading and writing. Sarah has difficulty following instructions at work, and learning any new task takes a long time.

Sarah’s current supervisor and her new one have put together a strategy to make the move to the new job as smooth as possible. After a couple of visits to the new area with Sarah they have:
   ◗ installed a light that indicates when the conveyor starts up since Sarah cannot hear the buzzer that alerts other workers
   ◗ repositioned the workstation Sarah will be using so that she is facing the emergency evacuation flashing light
   ◗ purchased special ear muffs to protect Sarah’s residual hearing
   ◗ prepared training materials for Sarah that use simple words and pictures of the work she will be doing
   ◗ arranged for additional support for Sarah for the first month in the new position to help her learn the new tasks.