



Information Sheet

Hearing Impairment and assistive technology



Hearing impairment (also referred to as hearing loss) is a generalised term used when a person's hearing falls below standard hearing levels. People may experience varied levels of hearing impairment, which is described using the terms mild, moderate, severe and profound.

A hearing impairment can affect a person's ability to participate in activities of daily living including communicating with family, friends or workmates, watching television, listening to the radio or attending public forums. Assistive technology (aids and equipment) is available to assist people to participate in some of these activities.

Telephones and mobile phones

Telephones and mobile phones with features designed to assist users with a hearing impairment are available. Features may include:

- ▶ **Amplified and adjustable ring tone**—This is designed to amplify the volume and pitch of a ring tone and may be available as either a standard phone feature or as an external extension ringer incorporated into the existing phone.
- ▶ **A handset amplifier**—This is designed to increase the volume and clarity of the handset sound, that is, increases the volume of the voice of the incoming caller. A handset amplifier may come as a standard feature on a telephone or as a portable handset amplifier that can be added to most phones. An alternative feature is available that also increases the outgoing volume of the user to make their voice louder for those to whom they are speaking.
- ▶ **Adjustable tone and pitch**—Some people with a hearing impairment are only able to hear certain frequencies of sound, for example, they may only be able to hear people with low or high voices. Tone and pitch adjustment can help provide the appropriate frequency of sound that the user can hear.
- ▶ **Hearing Aid compatible**—A telephone or mobile phone may be used by people with a telecoil (T-switch) hearing aid. A hearing aid compatible telephone allows the sound through the handset to be directed straight to the hearing aid, reducing the interference of background noise and improving the sound clarity.
- ▶ **Hands-free speaker**—This allows the handset sound to be projected to both ears and may also feature volume adjustment.
- ▶ **Headset jack**—A headset with two ear pieces allows the handset sound to be directed and heard through both ears simultaneously. Some headsets may have additional amplification adjustments to the handset sound.

- ▶ **Flashing lights**—This provides a visual indication that the telephone is ringing and may come as a standard feature or as a separate attachment.
- ▶ **Vibration alert**—This is often a standard feature on a mobile phone and means the phone vibrates to indicate an incoming call or text message.
- ▶ **Text messaging**—This is a standard feature on mobile phones and allows a person to have a conversation through visual text rather than audible speech.

TTY machine

A TTY machine (teletypewriter or text phone) assists people who are deaf or hearing impaired to communicate via written text through the telephone line. The machine consists of a telephone with a keyboard and LCD display. A TTY machine allows a message to be typed using the keyboard and the conversation is read from the display. A TTY machine can be used for direct conversation with another TTY machine or can be used to communicate with voice users through the National Relay Service (NRS)—see page 3.

Internet communication strategies

There are numerous free instant messaging (IM) programs available through the internet. These allow communication via typed messages which are instantly displayed on the screens of others directly participating in the conversation.

Email is another common means of providing communication via typed messages which are received when the recipient checks their email.

While historically computers have been used to send and receive internet messages, mobile phone technology has increased to the point that users can often access, send and receive internet messages via mobile phones.

Television and radio

Portable headsets can be used to listen to the television or radio. Headsets can be hearing aid compatible allowing the sound through the headset to be directed straight to the hearing aid, reducing the interference of background noise and improving the sound clarity. Other headsets allow the volume to be adjusted through the headset without increasing the sound of the television or radio. This may be useful if more than one person with varied levels of hearing impairment is listening.

Teletext (subtitles) is a feature that is available on many DVDs and some television programs. Teletext displays the sound in written text at the bottom of the television.

Alarm clocks

Some alarm clocks are available with a visual flashing light or vibrating alert. Vibrating alert pads can be positioned under a pillow to indicate when a bedside clock alarm has been activated. Some wrist watches and mobile phones also feature vibrating alarms to indicate reminders or programmed times.

Doorbells, smoke alarms and baby monitors

Doorbells, smoke alarms and baby monitors are available with flashing lights or vibrating pager to alert when the alarm or doorbell has been activated. Some doorbells are available with adjustable ringing volume and melody.

Induction loops

An induction loop is used in public places where there is likely to be background noise such as a lecture theatre or church. Induction loops feature a wire loop cable, which is positioned around the room creating a magnetic field where an amplifier can produce an audio frequency signal that is transmitted to the receiver of the listener. People with a hearing impairment can use either a hearing aid with a telecoil (T-switch) facility or wear a loop listening headset to receive the signal. The induction loop cancels the microphone of the hearing aid and transmits the signal straight to the receiver, which reduces the interference of background noises.

Deaf Can:Do (Royal South Australian Deaf Society Inc)

Deaf Can:Do works with South Australia's Deaf community to provide a range of services and programs. These are designed to assist Deaf persons to promote and extend their social, educational and occupational activities, promote public interest, maximise opportunities of access to general community services, advocate and support self-advocacy, provide specific support to aged Deaf persons with other disabilities and support the provision of housing to Deaf people in need.

Contact: 8223 3335 (TTY 8223 6530) or: www.deafcando.org.au.

Can:Do Hearing (previously Hearing Loss Solutions)

A not-for-profit audiology clinic and an initiative of *Deaf Can:Do* that provides services to people with hearing impairment. Services include assessment and fitting of hearing aids, group rehabilitation classes, lip-reading classes, fitting of an assistive listening device and education about strategies to communicate with a hearing impairment.

Contact: Adelaide clinic: 8100 8209 (TTY 8223 653); Blackwood Clinic: 8178 0022 or refer to the web site: www.candohearing.com.au

National Relay Service (NRS)

NRS is an Australia-wide telephone service that allows people who are deaf, or have a hearing or speech impairment, to make phone calls or be contacted by others through a relay officer. Calls are relayed at no extra cost. A number of relay call options are available depending on a person's needs, including internet relay, Speak & Read, Type & Read, Type & Listen or Speak & Listen.

Contact: 1800 555 660 (TTY 1800 555 630) or www.relayservice.com.au

Hearing Services (previously Hearing Solutions)

A service of Guide Dogs SA.NT which offer free advisory rehabilitation and communication skills training programs for people with a hearing impairment. Services include: communication skills training programs including Effective Management of Hearing Loss courses, training, information and sale of assistive listening devices, information about options, care and management of hearing aids, support to effectively manage hearing impairment and associated conditions and the Specialised Smoke Alarm Scheme which assists adults with a profound hearing loss.

Contact: 8203 8333 (TTY 8203 8391) or www.guidedogs.org.au.

Lions Hearing Dogs Inc

Funded and managed by the Lions Clubs of Australia and Papua New Guinea to provide deaf and hearing impaired people with a dog which will alert their owners to sounds by making physical contact and leading them to the source.

Contact: 8388 7836 (TTY 8388 1297) or www.hearingdogs.asn.au.

Contacting the Independent Living Centre

For further information or to make an appointment to visit the display please contact the Independent Living Centre.

The Independent Living Centre offers free advice on equipment and techniques to help you with everyday tasks.

Independent Living Centre

11 Blacks Road

Gilles Plains SA 5086

Phone: 1300 885 886 (SA & NT callers only) or 8266 5260

Fax: 8266 5263

Email: ilcsa@dfc.sa.gov.au

Website: www.sa.gov.au/disability/ilc

Accessible off street parking is available.

Bus routes:

From the city T500/T501 or 207/208 to Stop 28 Sudholz Road

Timetable information: 8210 1000

