

Amplification Options for Adults

If you suffer from hearing loss, you have may have several options to help improve your hearing. Speak to your audiologist.

In-the-Ear (ITE) Hearing Aid

This type of hearing aid fits completely in the ear and outer ear canal. This is a very popular style for adult hearing aid users but there are drawbacks for children using them. They cannot be used with FM systems and usually cannot be used with other listening devices. This size of hearing aid is not powerful enough to provide adequate amplification for severe or profound hearing loss. For severe or profound hearing loss, a behind-the-ear hearing aid is required.

Behind-the-Ear (BTE) Hearing Aid

This type of hearing aid sits on top of the ear. Amplified sound is routed to the ear through tubing and an ear-piece called an ear-mould. These hearing aids can provide the amplification necessary for even a profound hearing loss, can be attached to other special listening devices such as FM systems, and can have excellent flexibility in how they are programmed. Because the electronics are behind the ear and not in the actual ear canal, BTEs are particularly useful for those with chronic ear infections or for those who produce a large amount of ear wax. Behind-the-ear hearing aids and ear-moulds now come in a variety of colours and designs.



Open Fit Hearing Aid

Open fit hearing aids are similar to the behind-the-ear (BTE) style because the amplifier and electronics sit on top of the ear. However, these hearing aids can be much smaller and the tubing that brings the sound to the ear is ultra slim with a small flexible tip that sits in the ear canal. The small tip in the ear results in an open fit without plugging the ears. An open fit hearing aid usually results in a more comfortable fit, a more natural sound, and can eliminate problems with your own voice. However, the open fit hearing aids are not appropriate for severe hearing losses and are best for persons with mild to moderate high frequency hearing loss.



Fact Sheet

CROS (Contralateral Routing of Signal)

This hearing aid system is designed for people with unilateral hearing loss (CROS) or for hearing losses which are much more severe in one ear than the other (BI-CROS). A microphone is placed on the poorer ear and the signal is routed to a hearing aid on the better ear. This provides sound from the "dead" or unusable side. While this does not restore full ability to localize sounds in space, it does provide useful sound information that is not otherwise available to the individual.

FM Systems

These are assistive listening devices used to improve the signal-to-noise ratio for the listener and to reduce the effects of poor acoustics. The microphone is placed near the sound source (usually the speaker's mouth but the source can also be a television or radio, for example) and a receiver for the listener. The receiver can be a separate module with headphones, or it can be a miniature piece attached to a BTE hearing aid. Some FM receivers are now being integrated directly into hearing aids. The listener is able to hear the speaker above the background noise at considerable distances. There are no wires connecting the listener to the speaker which gives mobility to both. These units are often of benefit for classes, lectures, conferences, meetings, in restaurants, and in large groups.

Cochlear Implant

A device surgically implanted into the cochlea to bypass the sensory organ to activate the hearing nerve directly. It is designed for individuals with severe-profound sensorineural hearing loss (in both ears, though only one is implanted) who do not receive benefit from hearing aid amplification. The system consists of a directional microphone, a cable and transmitter which fit behind the ear, a speech processor which can be worn in a pocket or on a belt, and the internal portion of the device (the magnet and receiver/stimulator) which are implanted in the mastoid process (behind the pinna). Once implanted, the device is programmed for the individual over several months.

The criteria for candidacy for cochlear implants is updated often, sometimes several times per year. Please check with your local cochlear implant professional for the latest criteria.

For more information, see the CAA Fact Sheet What Is A Cochlear Implant?

BAHA (Bone Anchored Hearing Aid)

This device combines a sound processor with a small titanium fixture implanted behind the ear. The system allows sound to be conducted through the bone rather than via the middle ear – a process known as direct bone conduction. The surgery is minor, and many patients report a wide range of advantages over other hearing devices. BAHA is used with people with chronic ear infections, congenital hearing loss, and/or single-sided deafness.