

ASSISTIVE TECHNOLOGY FACTS

HEARING

WHAT IS ASSISTIVE TECHNOLOGY?

Assistive technology, or AT, is any tool that allows individuals with disabilities to use their unique abilities to reach their goals. AT can range from low-cost tools such as a jar opener to more complex devices such as a power wheelchair or communication aid. Infants, children, adults and older persons with any type of disability can benefit from the use of AT.

What are Hearing Assistive Technology Systems?

They help make auditory information accessible to people with hearing loss either by amplifying sound or converting it to visual or tactile information.

Who is affected by hearing loss?

Roughly two out of 1,000 babies in the U.S. are born with hearing loss. Approximately 15 percent of American adults report some difficulty hearing, and nearly 50 percent of those 75 or older have a hearing loss that impacts their daily life.

There are different types and degrees of hearing loss. Some are due to a problem with sound being carried from the environment to the mechanisms of the ear. Some result from damage to the inner ear or the nerve pathways from the inner ear to the brain. Hearing loss ranges from mild, in which soft sounds are difficult to hear, to profound, in which all but the loudest sounds are undetectable.



What types of devices are available for those with hearing loss?

◆ **Alerting instruments** receive environmental sound input and then amplify the sound or translate it to light or vibration. Some devices respond to one specific sound, while others react to a variety of sound.



◆ **Assistive listening systems** help users hear better in a variety of environments by reducing background noise and bringing the sound closer to the listener. These can be worn alone or in addition to hearing aids.

◆ **Cochlear implants** are surgically implanted devices that aid individuals who have lost some hearing in their inner ear (cochlea).

◆ **Hearing aid devices** are fitted to a person's ear and hearing loss.

◆ **Telecommunication devices** help listeners use the telephone and/or internet. Landline phones can be amplified or captioned while cellular phones may use built-in accessibility options as well as apps for amplification or captioning. Video phones and video calls also help individuals who use lip reading cues or sign language to support their understanding.



What is a telecoil?

Also called a t-coil or t-switch, a telecoil is a small device inside of a hearing aid or cochlear implant that allows for the hearing aid to wirelessly connect to other hearing assistive technology systems. Consumers often report they do not know if their hearing aid has a

t-coil in it. Delaware law requires that hearing aid dispensers and audiologists inform consumers of a telecoil in their hearing aid and how to use it.

How about Bluetooth?

Another wireless, short range technology, Bluetooth enables the hearing aid to connect to other devices such as telephones, TVs and computers or tablets. Hearing Bluetooth technology is often proprietary, meaning it will only connect to specific device brands or models. This technology is evolving but is not yet useful in larger environments such as theaters.

What is captioning?

Captioning services convert sound into print information. This can be done for television, films, telephone conversations or for live gatherings (such as a meeting or in a classroom).

Where can I purchase hearing assistive technology?

Telecommunications and alerting devices can be purchased without a doctor's prescription. You may find these items at your local electronics store or through online vendors.



If you need a hearing aid, or other listening device, it is highly recommended you see an audiologist or licensed hearing specialist. People vary in their hearing loss and a perfect device for one may not work for another. Once the proper device is identified, it can be purchased from an audiologist or hearing

aid dispenser. You can expect to be seen for several appointments to have your aids adjusted and learn how to maximize their use. For more information on purchasing a hearing aid, visit www.hearingloss.org.

What are some things I should consider before purchasing hearing assistive technology?

- ◆ In what situations do I have difficulty hearing?
- ◆ What is the extent of my hearing loss?
- ◆ What are my interests, needs and preferences?
- ◆ Who are the people I communicate most with?
- ◆ What funding resources are available to me?



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If you are interested in learning more about Assisted Technology, please call (302) 831-6974 or visit our webpage at: www.dati.org

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