

Assistive Technology for Individuals who are Deaf or Hard of Hearing

In New Jersey, there are an estimated 750,000 individuals who are deaf or hard of hearing. In general, the term "deaf" refers to those who are unable to hear any sound, regardless of amplification. The term "hearing loss" pertains to those who have diminished capacity to hear. People who are "hard of hearing" can range from a mild-to-moderate hearing loss to severe hearing loss.

Assistive technology can provide greater access, increased independence, and maximize the quality of life for many individuals who are deaf or hard of hearing. This bulletin illustrates a variety of assistive technologies and identifies available resources to access these assistive technologies.

Telecommunication Devices & Services

Video phones (VP), telephones that can send and receive moving images so that users can see each other, are currently the telecommunication device of choice of those who use sign language to communicate. Consumers can call VP to VP, and non-videophone users can speak with VP users through the Video Relay Service (VRS). With VRS, a sign language interpreter bridges the conversation between non- and videophone users by signing and voicing the conversation for each party.

Amplified telephones allow users to increase the volume on the telephone as well as adjust the tone, or pitch, of the incoming voice. The amplification ranges from 30 to 60 decibels, depending on the make and model of the telephone, and most amplified telephones also have a feature allowing the user to adjust the volume and tone of the ringer.

Captioned telephones feature real time captions, in addition to volume and tone control. Should incoming information be difficult to hear, a captioned telephone user can read the screen on their telephone to keep up with the conversation while continuing to listen to the other party.

New Jersey Relay and CapTel Service is a free telecommunications service provided by Sprint and approved by the NJ Board of Public Utilities (BPU) ensuring equal communication access to telephone service for people with hearing or speech loss. Sprint has been providing NJ Relay and CapTel services since 2006. The system allows those with speech and/or hearing disabilities to access telecommunications services never before available to them. This service allows TTY or special equipment users, such as a captioned telephone or Braille TTY, to communicate with standard voice telephone users through specially trained relay operators or captioners. There is no additional charge to access Relay Services, and it can be accessed by dialing 711.

Listening Systems & Devices

Assistive listening devices (ALD) are amplification devices (not hearing aids) that can be used in large spaces as well as small group and one-on-one settings. The more common ALDs are Induction Loop (IL) systems, Frequency Modulated (FM) radio systems, Infrared (IR) systems and self-contained personal devices. The systems bridge the space between the actual sound source and the listener, and improve the ability to hear when there is background noise. These systems can be used with a television set, in class or meeting rooms, and in venues like auditoriums, theatres and places of worship.

ALDs amplify sound by tapping directly into the source of the sound through the use of a microphone and clarifying sound by decreasing or eliminating environmental sound. The primary function of the ALD is to significantly improve listening conditions for the individual with hearing loss.

Signaling and Alerting Devices

Signaling and alerting devices react to auditory sounds and signals by using flashing lights, vibrating a small receiver unit, or increasing the volume of an existing bell. These signaling systems can be designed to apprise individuals of different sounds in their home or workspace. Assistive devices are available that flash or vibrate to let one know that the phone is ringing, to indicate someone is at the door, and there are also vibrating cooking timers. Other assistive devices flash or vibrate to indicate that a baby is crying, or that it is time to wake up. Audible and visual smoke and carbon monoxide detectors are designed to provide a reliable early warning of any presence of smoke or gas.

Demonstration Centers in New Jersey

The New Jersey Division of the Deaf and Hard of Hearing (DDHH) operates a couple of "Assistive Communication Device Demonstration Centers" in New Jersey. These centers display assistive communication devices for people with hearing loss. The devices on display include amplified and captioned telephones, as well as other practical devices for home and office, such as door bells, alarm clocks, video phones, amplified sound systems, and more. The centers also offer hands-on demonstrations so that consumers can make informed decisions prior to obtaining such devices. To find current locations and schedule an appointment please contact the DDHH at (609) 588-2648, (800) 792-8339 toll free in New Jersey or email.

For additional information on AT devices and services for people who are deaf or hard of hearing, please contact ATAC of DRNJ. The Richard West Assistive Technology Advocacy Center (ATAC), a program of Disability Rights New Jersey provides information and referral, outreach and education, technical assistance and legal and non-legal advocacy in the area of assistive technology.

