# **Augmentative and Alternative Communication (AAC)**



**AAC** means all of the ways that someone communicates besides talking. People of all ages can use AAC if they have trouble with speech or language skills. Augmentative means to add to someone's speech. Alternative means to be used instead of speech. Some people use AAC throughout their life. Others may use AAC only for a short time, like when they have surgery and can't talk.

There are a lot of different types of AAC. No-tech and low-tech options include things like

- gestures and facial expressions,
- writing,
- drawing,
- spelling words by pointing to letters, and
- pointing to photos, pictures, or written words.

#### High-tech options include things like

- using an app on an iPad or tablet to communicate and
- using a computer with a "voice," sometimes called a speech-generating device.

A person may use different types of AAC because there are many ways that we all communicate. An **AAC** system means all of the tools of this type that a person uses.

## **Working With A** Speech-Language **Pathologist**

An SLP can help individuals find the right AAC system for them or their loved one. They also help users and the people they talk with learn how to use AAC to communicate. Not every tool works for every person. SLPs work with other professionals like occupational therapists and physical therapists if an individual has different physical skills that affect how they access their AAC system. Some AAC tools are covered by insurance, but some are not. An SLP can help people understand their options.

## Common Concerns

Professionals have been studying AAC for years and have learned a lot about how AAC helps people communicate. Here are some of the areas that research has helped us understand.

#### Age, Skills, and Timing

Some people wonder if children need to be a certain age before they can use AAC. Research shows that AAC helps people of all ages (even those younger than 3 years old)! There are no thinking skills, test scores, or other milestones individuals need to reach before AAC can help.

#### **Talking and Motivation**

A lot of people wonder if using AAC will stop someone from talking or will slow down language development. This is not true—research shows that AAC can help with these concerns! People who use AAC can also learn how to read and write.

#### Movement

Some wonder how someone can use AAC if they have trouble moving their arms and hands. There are many ways to use an AAC system besides touching it. An SLP may work with occupational therapists (OTs) and physical therapists (PTs) to find the best way for each person to use their AAC system.







# Hearing Assistive Technology Systems (HATS)

## Content contributed by

ASHA member Lindsey Jorgensen, AuD, CCC-A, PhD. and Kristine Hunt, BS

Hearing Assistive Technology
Systems (HATS) are systems
that assist with hearing in
different environments. This
chart breaks down HATS
into the following categories:
alerting devices, devices to
help in noise, loop system
devices, devices that
assist with telephones and
television, and pediatric
considerations for children
with hearing loss.

### **ALERTING DEVICES**

Alerting devices provide vibration or light flashes in response to sound. These devices are often used for doorbells, telephone ringers, fire alarms, baby monitors, and alarm clocks. New parents with hearing loss may want alerting baby monitors to let them know when their baby is crying.

## **DEVICES TO HELP IN NOISE AND AT A DISTANCE**

FM systems and Bluetooth devices help listeners in noisy settings or when they are at a distance from the speaker. Both use wireless technology to transmit sound from a microphone at the sound source to a receiver worn by the person with hearing loss. Each may be used with or without hearing aids or cochlear implants. They are useful in noisy places like restaurants, classrooms, conferences, senior centers, and places of worship.

## LOOP SYSTEM DEVICES

Induction loop systems are often used in public areas. Loops are located throughout the walls/floors of a specific area. These induction loops transform the sound to magnetic force. Sound from a microphone is transmitted through the loop as a magnetic signal. The signal is received by a listener with hearing aids, cochlear implants, or other devices that have a telecoil which changes the signal back to a sound.

## **TELEPHONES**

Amplifiers make both the ringing sound and speaker's voice louder. Bluetooth devices or telecoils can connect hearing aids or cochlear implants directly to the telephone to make the signal clearer. Captioning transcribes speech into writing on an attached screen in real time.

#### **TELEVISION**

Infrared systems convert sounds from the TV to infrared waves that are sent to the listener's infrared receiver and changed back to sound. Bluetooth devices can be used to connect hearing devices directly to the television. Sometimes, intermediary devices may be used to connect the hearing device to the TV via an FM or Bluetooth signal.

## PEDIATRIC CONSIDERATIONS

Children with hearing loss may benefit from HATS. Classroom Auditory
Distribution Systems (CADS) can be useful in school settings. These
are sound field systems. The teacher wears a microphone. A separate
microphone is shared by students. The sound is sent from the microphone
to speakers in the classroom. Portable personal amplifiers help with
one-on-one conversations. The speaker wears a microphone that
transmits sound to the listener's device. Personal FM systems are another
beneficial tool for children with hearing loss in classroom settings.
Educational audiologists can help determine appropriate classroom HATS
for each child.



For more information about hearing assistive technology, hearing aids, hearing loss, balance problems, preventing falls, or referral to an ASHA-certified audiologist, contact:

## **ASHA Audiology**

2200 Research Boulevard, Rockville, MD 20850 800-638-8255 Email: audiology@asha.org

Website: www.asha.org