

>looking after bone conduction hearing aids

Learn about bone conduction hearing aids (BCHAs), how they work, and how to take care of them in the classroom setting.

Many children who are deaf or hard-of-hearing (DHH) use devices to amplify sound, including bone conduction hearing aids (BCHAs). BCHAs look different from regular hearing aids because they don't sit inside the ear. Here's what you need to know about BCHAs, including how they work and how to care for them in the classroom.

WHAT IS A BONE CONDUCTION HEARING AID?

A BCHA is a type of hearing aid that transmits sound waves through the bones of the head directly to the cochlea (inner ear). This type of hearing aid is especially helpful for children with certain types of hearing loss or when issues with the outer or middle ear (such as chronic ear infections) make regular hearing aids unsuitable.

BCHAs consist of two parts: an implant that is surgically placed into the bone behind the ear and an external sound processor. The sound processor is either attached via a magnet or connected through a fixture that protrudes through the skin, known as an "abutment."

Some BCHAs do not require a surgical implant. Instead, the device may stick to the skin behind the ear or be held in place by a headband.

HOW DO THEY WORK?

In typical hearing, sound travels through the outer ear, middle ear, and cochlea. Bone conduction hearing aids bypass the outer and middle ears.

The sound processor captures sound and converts it into vibrations. These vibrations are transferred to the implant, which sends them through the bones of the head directly to the cochlea. The cochlea then converts the vibrations into electrical signals that travel through the hearing nerve to the brain.

HOW TO LOOK AFTER A BONE CONDUCTION HEARING AID IN THE CLASSROOM

A BCHA requires special care and maintenance. If a child uses one, they or their caregivers are responsible for taking care of it, so understanding the basics is helpful. Here are some essential tips for classroom care:

KEEP THE SOUND PROCESSOR

DRY: The external sound processor is not waterproof, so it should be kept dry. If the student is exposed to water or sweat during class activities, the device should be removed or placed in a waterproof cover to avoid damage.

DRY THE SOUND PROCESSOR IF

WET: If the sound processor becomes wet, it needs to be dried promptly using a special drying unit. Check with the child's family to see which drying unit they use for this purpose.

CLEAN THE SOUND PROCESSOR:

It's important to keep the sound processor clean. Avoid using hairspray or other products around the device. To clean it, make sure your hands are clean and dry, and use a dry, non-abrasive cloth to wipe it down.

SECURE THE DEVICE: In a classroom environment, there may be times when the sound processor could be bumped or knocked off. A safety line can be used to attach the sound processor to the child's clothing to prevent loss. Ensure that the safety line is short enough to prevent any risk of strangulation.

If you're interested in learning more, it may be helpful to look for video resources from individuals who use BCHAs, as these can provide additional insights into how the devices work in everyday classroom situations.

CHECK FOR PROPER PLACEMENT:

Help ensure the sound processor stays in place throughout the school day, particularly during activities like transitioning between classrooms or sitting at desks. A sweatband or other stabilizing accessories can also help keep the device secure and prevent moisture from interfering with the sound processor.

BATTERIES AND CHARGING:

The batteries of the sound processor will need to be recharged or replaced regularly. It's a good idea to keep spare batteries available at school for quick replacements. Make sure the student knows how to check their battery status.

DID YOU KNOW?

Bone conduction hearing aids only work if the cochlea is functioning properly. They differ from cochlear implants, which involve electrodes placed directly in the cochlea to stimulate the hearing nerve.

For further information about Deaf Children Australia deafchildrenaustralia.org.au/buildingbridges

03 9539 5300 or email: communications@deafchildren.org.au



BUILD ING BRIDGES

Deaf Children Australia.

Deaf Children Australia uses the term 'deaf' to refer to all degrees and types of hearing loss. Revised 2019 – Copyright © Deaf Children Australia 2019

