

How bone conduction connects you with sound

Hearing is the process of sound travelling through our outer, middle, and inner ear to the hearing nerve and then the brain, which interprets what we hear. If one of these parts isn't working correctly and you experience hearing loss, maybe due to a condition such as recurring ear infections, a bone conduction solution may help you hear.

Understanding your hearing loss is the first step to finding a hearing solution that is right for you.

Bone conduction can be used as a hearing solution for common conditions and has been shown to benefit people with conductive hearing loss, mixed hearing loss and single-sided sensorineural deafness. Bone conduction solutions can be used to treat the hearing loss associated with conditions such as:



Atresia and microtia



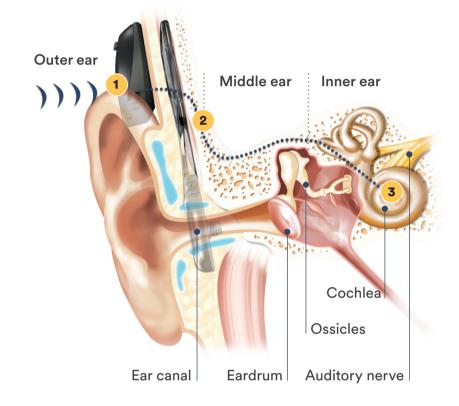
Chronic otitis media



Otosclerosis



Cholesteatoma



Bone conduction solutions use your body's natural ability to deliver sound through the bone. The Osia® System and the Baha® System work in different ways.

Osia System (illustrated above)

- 1. The Osia 2 Sound Processor captures sound in the air and digitally analyses the signal. The signal moves through the skin to the implant.
- 2. The Piezo Power transducer vibrates, sending vibrations through the implant to the bone.
- The bone carries the vibrations directly to your inner ear where they are converted into electrical impulses and sent to the brain.

Baha System and Baha Start

- 1. The Baha 6 Max Sound Processor captures sounds in the air.
- 2. The sound processor turns the sound into vibrations and sends them through to the bone via an implant or connector disc.
- 3. The bone carries the vibrations directly to your inner ear where they are converted into electrical impulses and sent to the brain.



Osia System

The Osia System features an active hearing implant that uses digital piezoelectric stimulation to send sound through the bone to your inner ear. You connect the Osia 2 Sound Processor to your implant via a magnetic connection by simply placing it on your head.



Baha System

The Baha System is designed to help you hear clear, rich, and natural sound² so you can engage in many of the activities you love. The Baha System consists of an implant and the external Baha 6 Max Sound Processor that you simply add to your implant using an abutment connection.





Baha Start

Baha Start is a non-surgical solution that allows you to hear through bone conduction before you decide on implant surgery. Baha Start consists of a Baha 6 Max Sound Processor attached to a Baha Softband or SoundArc...

Talk to your hearing health professional about a bone conduction demonstration or visit www.cochlear.com for more information.

References

- 1. Dun CA, Faber HT, de Wolf MJ, Cremers CW, Hol MK. An overview of different systems: the bone anchored hearing aid. Adv Otorhinolaryngol. 2011;71:22-31.
- 2. Hoffman J. Subjective evaluation of clear rich and natural sound. Cochlear Bone Anchored Solutions AB, Sweden. 2020; D1788013.

Please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information. In Australia, Baha bone conduction implant systems are intended for the treatment of moderate to profound hearing loss.

Cochlear, Hear now. And always, Nucleus, Kanso, Baha, the elliptical logo, and marks bearing an ® or ™ symbol, are either trademarks or registered trademarks of Cochlear Limited or Cochlear Bone Anchored Solutions AB (unless otherwise noted).

© Cochlear Limited 2022. All rights reserved. 2022-02