# How bone conduction connects you with sound

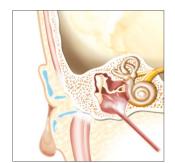


Hearing is the process of sound traveling through our outer, middle, and inner ear to the hearing nerve. The hearing nerve then sends a signal to the brain which interprets what we hear. If one of the parts in your ear isn't working correctly and you experience hearing loss, a bone conduction solution may help you hear.

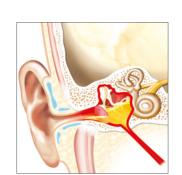
Understanding your hearing loss is the first step to finding a hearing solution that is right for you.

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 deafness.<sup>1</sup>

Bone conduction solutions can be used to treat hearing loss associated with conditions like:



Microtia and atresia



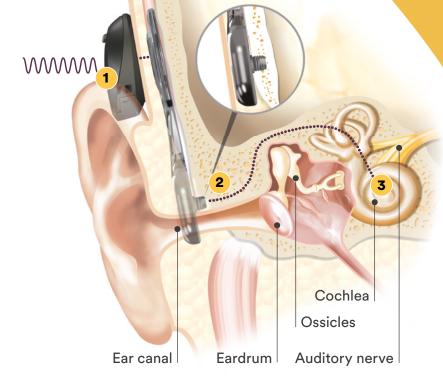
Chronic otitis media (chronic ear infections)



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)

- The Osia Sound Processor captures sound in the air and digitally analyzes 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.
- 3. 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 Sound Processor captures sounds in the air.
- 2. The sound processor turns the sound into vibrations and sends them through to the bone via a small implant or through a non-surgical Baha Start solution.
- 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 is powerful, and its unique technologies are optimized to deliver high power and clarity, especially in high frequency sounds, important for understanding what people around you are saying. You connect the Osia Sound Processor to your implant via a magnetic connection by simply placing it on your head.



See how the Osia System works



Learn about a recipient's experience with the Osia System





# **Baha System**

The Baha System is an effective, easy-to-use, and reliable permanent hearing solution in circumstances when the Osia System cannot be utilized. The Baha System consists of an implant and the external Baha 6 Max Sound Processor that you simply connect to your implant using an abutment connection.



See how the Baha System works



Learn about a recipient's experience with the Baha System





# **Baha Start**

Baha Start is a non-surgical solution that uses bone conduction to help you hear clear, rich, and natural sound<sup>2</sup>, utilizing the latest Baha 6 Max Sound Processor technology. Baha Start consists of a Baha 6 Max Sound Processor attached to a Baha Softband or SoundArc<sup>™</sup>.



See how Baha Start works



Learn about a recipient's experience with Baha Start

## References

- 1. Dun CA, Faber HT, de Wolf MJ, Cremers CW, Hol MK. An overview of different systems: the bone anchored hearing aid.
- 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.

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Talk to your hearing health provider about a bone conduction demonstration.



Learn more at www.cochlear.us/boneconductionsolutions