



Earliest Interactions
A MAINE EHDI PROGRAM



A FAMILY'S GUIDE TO

Unilateral Hearing Differences

Treatment Options



What are UHDs?

Unilateral hearing differences (UHDs) refer to a child having hearing levels outside of the typical range in only one ear. *Bilateral hearing differences* refer to hearing levels outside of the typical range in both ears. A child with UHDs may have hearing levels in one ear only ranging from slight to profound. Intervention options will generally look different for a child with severe to profound unilateral hearing levels, versus a child with mild to moderate unilateral hearing levels.

How do UHDs impact a person's ability to hear?



We use information from both ears to understand where a sound is coming from, and to understand speech in noisy environments. When relying on one ear to listen, these tasks become more difficult.

What hearing technology options are available for unilateral listeners?



Many hearing technology options exist for unilateral listeners. They are summarized in the table on the other side of this page. →

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	Purpose	Who Can Benefit	Typical Age Range	Surgical Requirements
Bone Conduction (BC) Device	Provides sound awareness where there is limited benefit from a hearing aid by sending sounds to the ear with typical hearing; also provides stimulation of inner ear for children with unilateral conductive/mixed hearing differences	Children with unilateral severe-to-profound hearing levels or conductive/mixed hearing differences where child's bone conduction thresholds are less than 55 dB	Appropriate for all ages, but fitting age varies based on degree of hearing levels and wearing option	Depending on type of bone conduction device, a surgery may be needed. Many BC devices have a non-surgical wearing option.
Cochlear Implant (CI)	Provides access to sound in the implanted ear through electrical stimulation	Children with unilateral severe-to-profound hearing levels	FDA approved for 9 months and older	Will require surgery and overnight hospital stay for observation.
Contralateral Routing of Sound (CROS) System	Provides sound awareness where there is limited benefit from a hearing aid by sending sounds to the ear with typical hearing	Children with unilateral severe-to-profound hearing levels	Teenagers and older	None
Hearing Aids	Amplifies sounds to improve access to sound in the aided ear	Most children with unilateral hearing differences may be a candidate	All ages	None
Remote Microphone (RM) System	Supports listening in challenging environments by overcoming impact of distance, noise, and poor acoustics	Children in daycare, schools, or any group activity	All ages; most commonly used when a child reaches school age	None, but can be a standalone device, or utilized in conjunction with other personal hearing technology