




# **EHDI 2025- Managing conductive hearing loss in the EHDI world**



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# Disclaimers

## Jess

- Salary from St. Luke's Health System and Idaho State University
- Member of Idaho Sound Beginnings Advisory Board
- 2 Ears 2 Learn Board Member
- No financial disclaimer related to this presentation

## Gabe

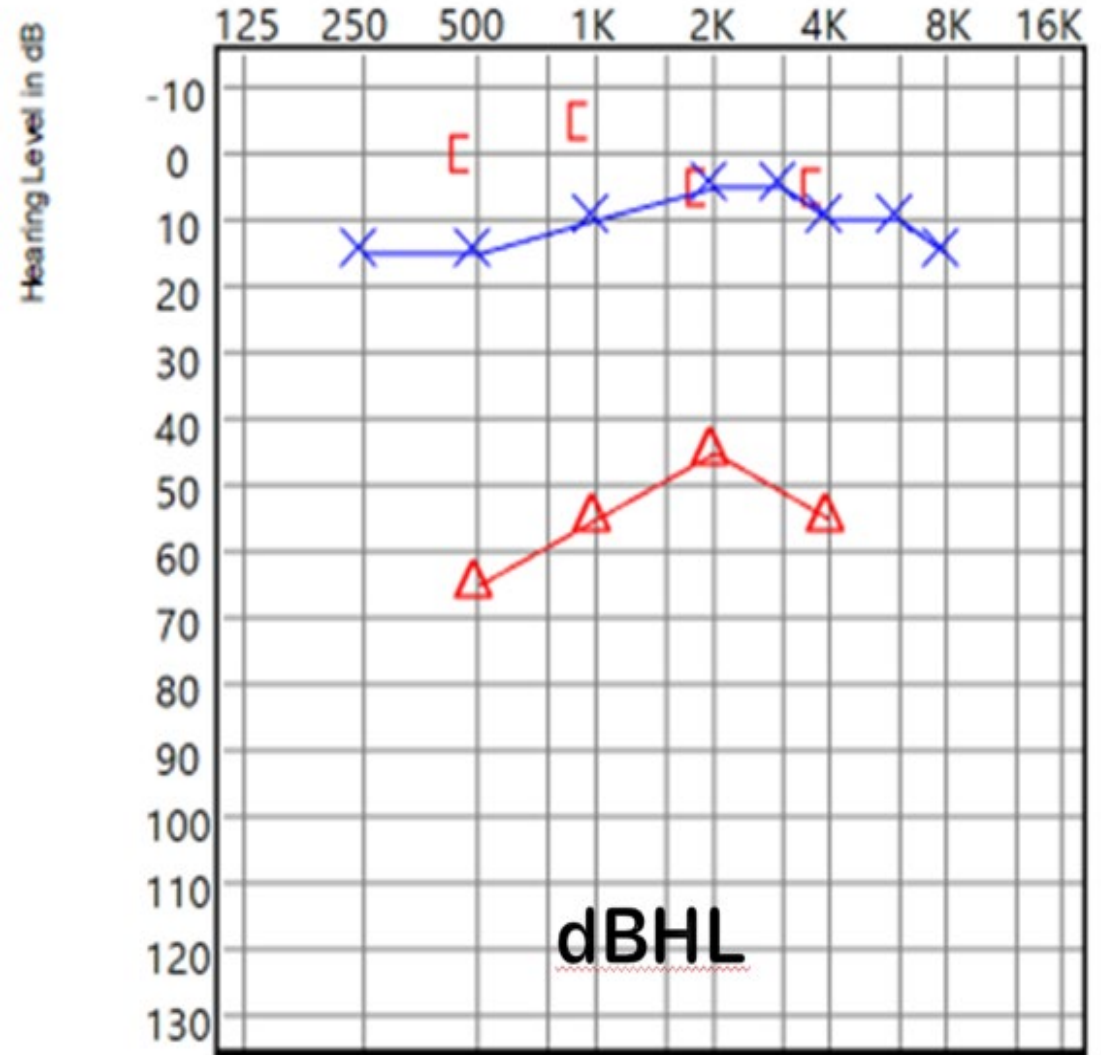
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# Learner Objectives

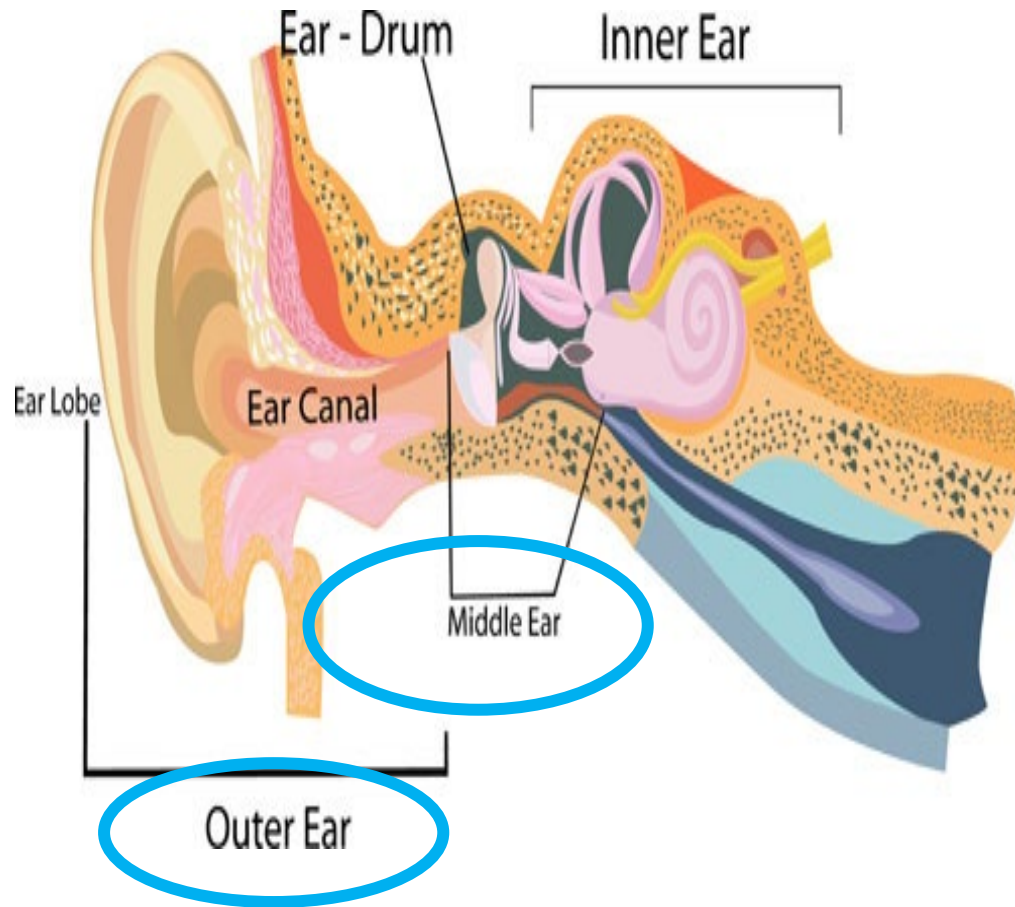
- Discuss potential challenges of conductive hearing loss diagnosis for infant population.
- Discuss potential barriers to achieving the 1-3-6 goals with infants who are diagnosed with conductive hearing loss.
- Discuss potential solutions to these barriers and how to help families achieve intervention by 6 months of age.



# Conductive hearing loss



# Causes of conductive hearing loss



- Otitis Media
- Eustachian tube dysfunction
- Perforated tympanic membranes
  - Cholesteatomas
  - Cerumen impactions
  - Foreign bodies
- Congenital abnormalities



**What are  
challenges  
with managing  
conductive  
hearing loss?**



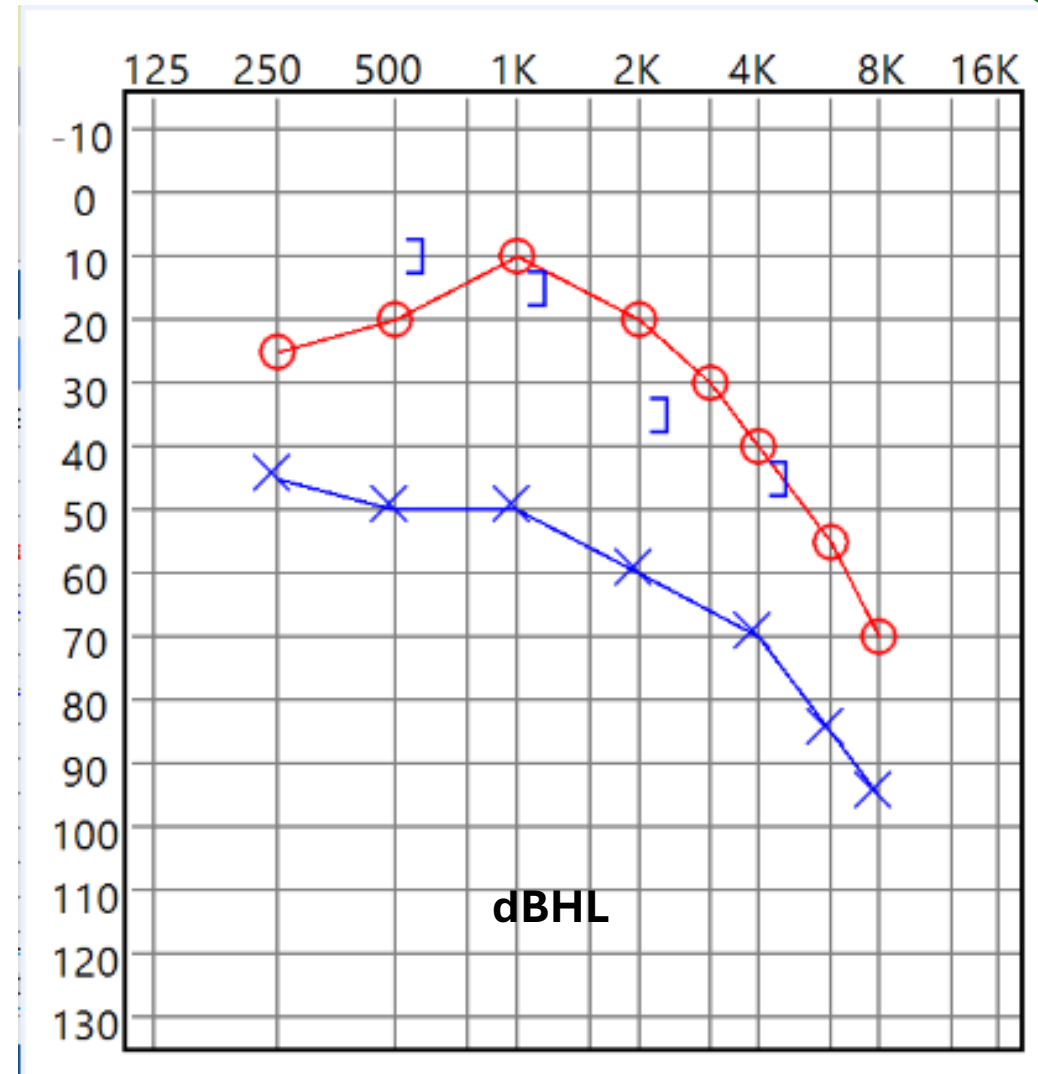
# CDC 2022- Hearing loss in children

August 2024

		Total Number of Reported Infants who are D/HH, 2022 CDC EHD/HSFS						6,272 Children	
		BILATERAL (by Ear)			UNILATERAL (by Ear)			LATERALITY UNKNOWN (i.e., unknown if case is a unilateral or bilateral)	
		RIGHT EAR	LEFT EAR	UNKNOWN EAR (level of reduced hearing for each ear)	RIGHT EAR	LEFT EAR	UNKNOWN EAR		
Sensorineural	Slight	44	39	0	0	8	8	0	0
	Mild	566	559	2	2	82	96	0	2
	Moderate	573	567	1	1	82	91	0	3
	Moderately Severe	293	292	0	0	40	56	0	0
	Severe	237	259	0	0	73	73	0	1
	Profound	567	557	0	0	144	148	0	1
	Unknown Severity	58	54	0	0	6	11	0	0
Conductive	Slight	6	7	0	0	2	0	0	0
	Mild	69	56	0	0	38	14	0	0
	Moderate	65	76	0	0	98	39	0	1
	Moderately Severe	72	73	0	0	163	107	0	0
	Severe	31	29	0	0	44	17	0	2
	Unknown Severity	48	44	0	0	63	51	0	2
Mixed	Slight	1	2	0	0	2	1	0	0
	Mild	39	42	0	0	7	4	0	0
	Moderate	81	93	0	0	27	25	0	0
	Moderately Severe	83	73	0	0	24	22	0	0
	Severe	57	53	0	0	16	18	0	0
	Profound	42	50	0	0	9	8	0	0
	Unknown Severity	21	12	0	0	6	4	0	0

[https://www.cdc.gov/ncbddd/hearingloss/2022-data/documents/12\\_2022\\_HSFS\\_Type-and-Severity.pdf](https://www.cdc.gov/ncbddd/hearingloss/2022-data/documents/12_2022_HSFS_Type-and-Severity.pdf)

# Mixed hearing loss





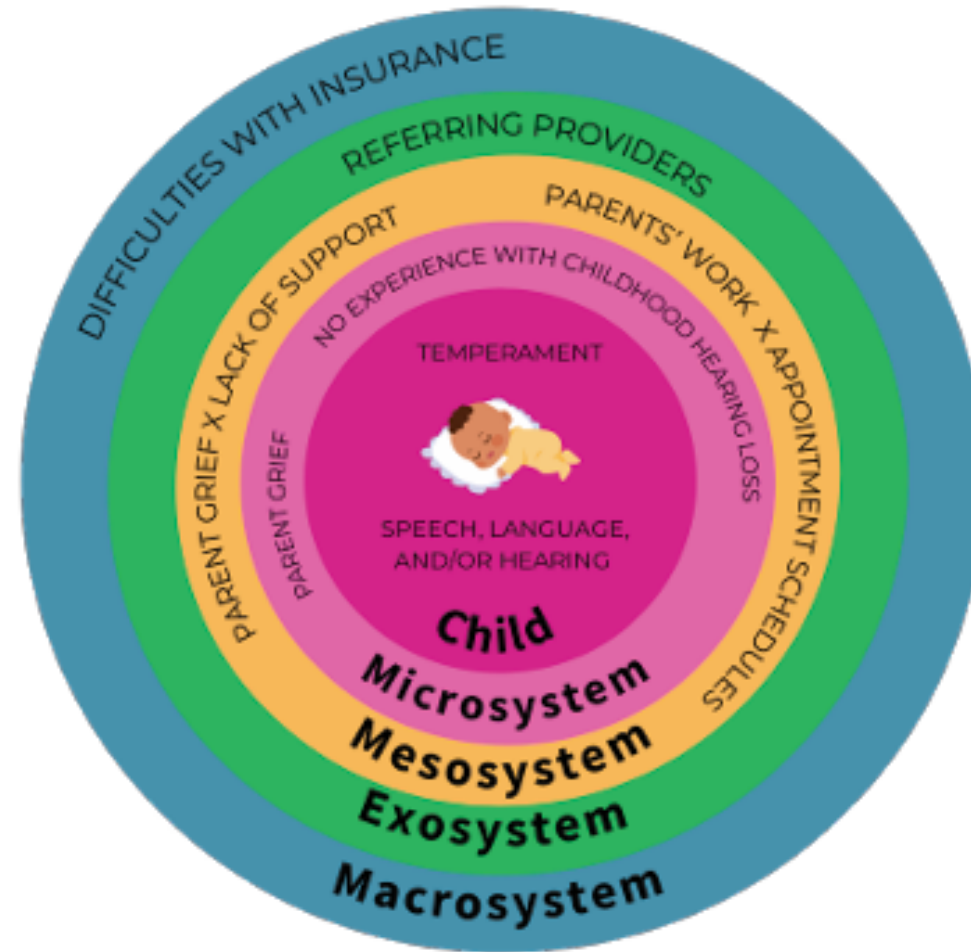


# Barriers to 1-3-6

- Fluctuating hearing levels
- Timely access to medical/otologic intervention
- Medical insurance/coverage

**Figure 1**

*Barriers to On-Time Enrollment in Early Intervention  
by System of the Bioecological Model of Human  
Development.*



*Note.* This figure is based on the description of nested systems in Bronfenbrenner and Morris (2006).

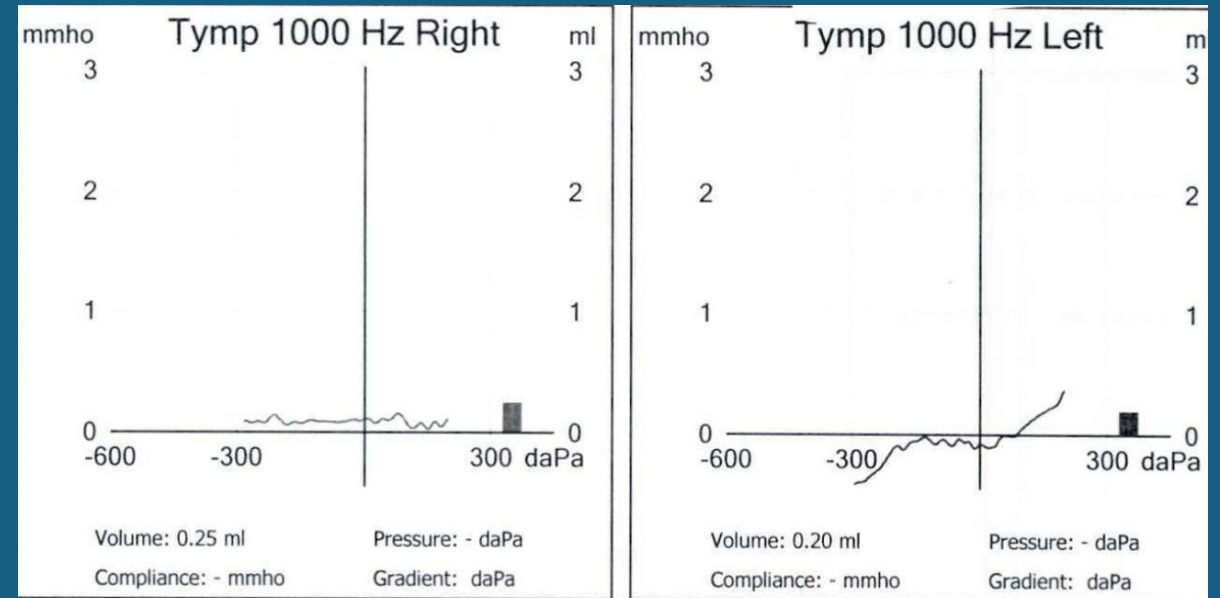
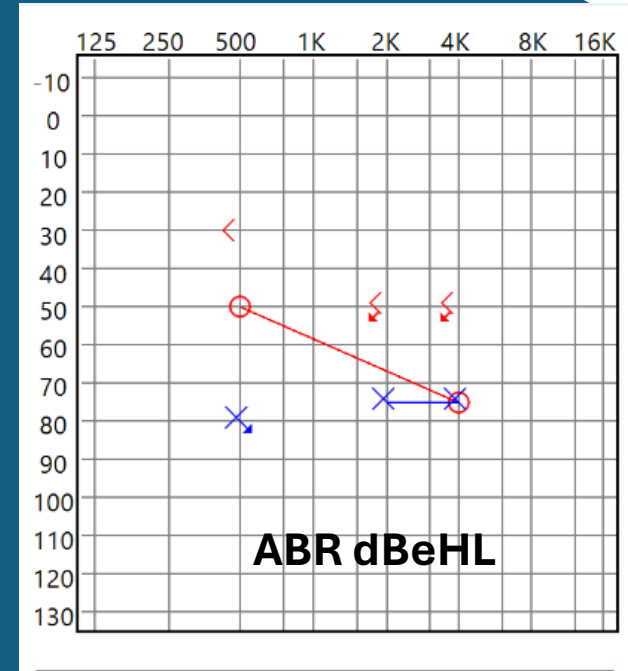


**Possible solutions**



# Case: B.S.

- Missed UNHS
- Audiology clinic at 1.5 months old
- Adoptive- Fam Hx hearing loss reported





# Working as a team

- Family
- Medical home
- Pediatric Otolaryngologist
- Pediatric Audiologist

Keys to facilitate healthy working relationship between audiologists and otolaryngologists:

- Effective communications
- Optimize workflows
- Educational opportunities

Bassett, A. (May 2021). *Exploring the Interdisciplinary Relationship Between Otolaryngology and Audiology*. Audiology Today, Volume 33, Number 3



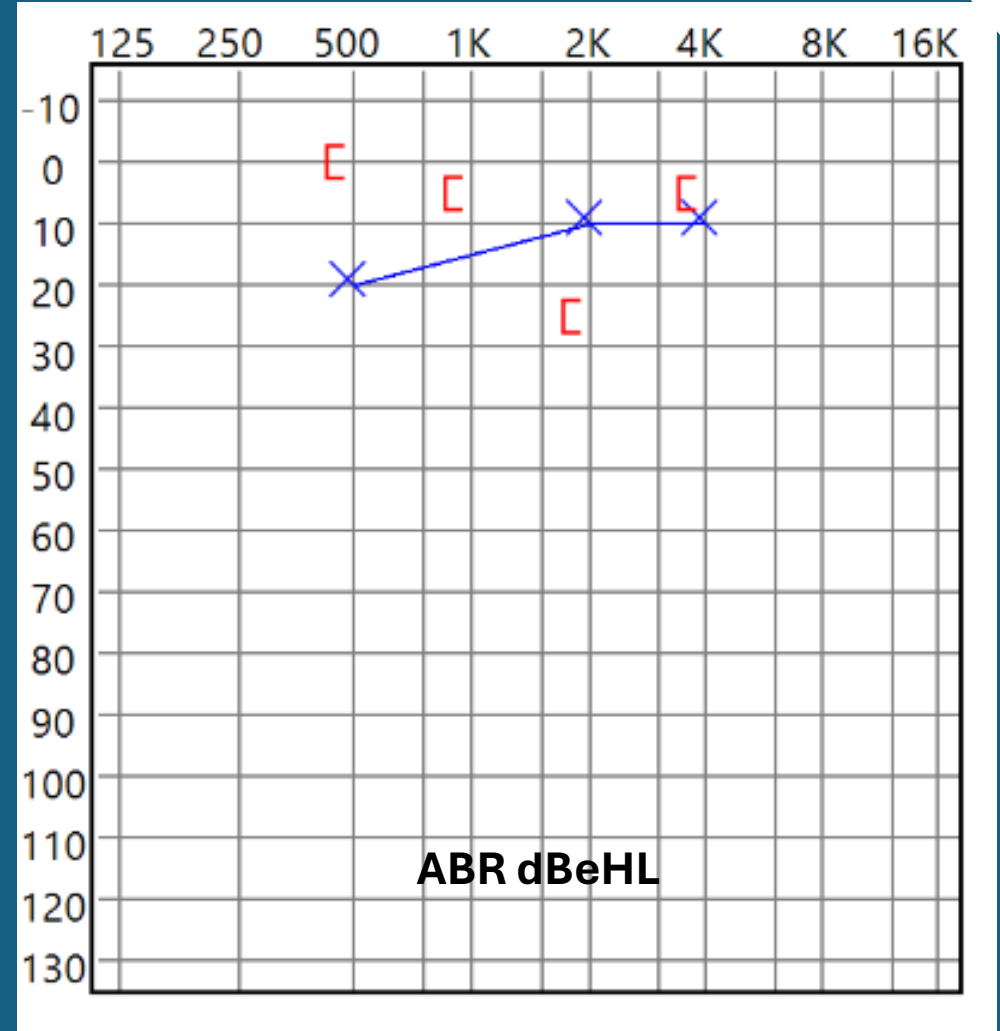
# Our team

- Great communication
  - Electronic medical records
  - Phone calls/emails
- Coordinate appointments (ENT/Audiology)
  - Clinic appointments
  - Sedation appointments
- Hearing loss clinic
- Clinical education



## Case: I.G.

- 1 month old, referred from hospital UNHS
- Aural atresia/Microtia



# Bone conduction devices with softbands for infants & young children

## Loaner device programs

- Cochlear Corp
- Oticon Medical



<https://www.oticonmedical.com/us/solutions/bone-conduction/ponto-for-children>



<https://www.cochlear.com/us/en/home/products-and-accessories/cochlear-baha-start>



# Bone conduction devices with softbands for infants & young children

## Device assistance programs

- <https://earcommunity.org/>
- <https://2ears2learn.org/>



2 Ears 2 Learn

a Non-Profit for Children with Microtia and Aural Atresia

# Traditional hearing aids assistance programs

## **Loaner Hearing Aid programs**

- Oticon – Pediatric loaner bank program
- Loaner bank programs in certain states

<https://www.infanthearing.org/HA-loaner/>

- Clinic loaner bank



# Traditional hearing aids assistance programs

## Grants options for Hearing Aids

- UnitedHealthcare Children's Foundation

<https://www.uhccf.org/>

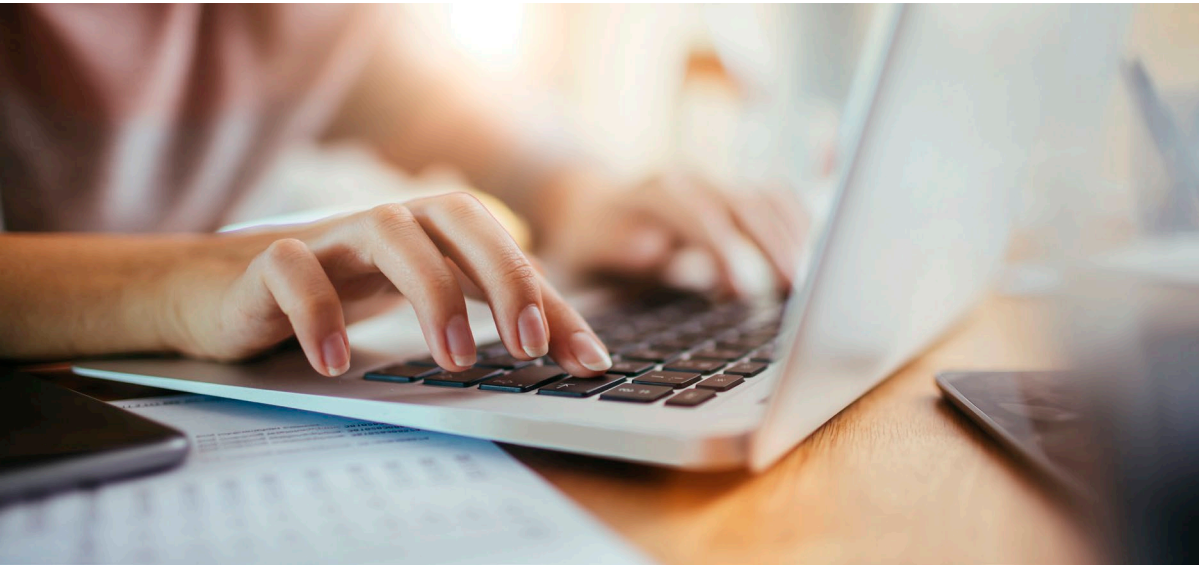
- HIKE Fund

<https://thehikefund.org/>



# Our team

- Paperwork ready to go for families
- Audiology assistant working on insurance requests



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**Questions**

# Reference

- Bahammam, F. A., Tolley, N., Kuchai, R., Benjamin, E., & Rollin, M. (2024). Analyzing factors and reasons behind non-attendance of ENT patients: Clinical audit. *Ear, Nose, & Throat Journal*, 1455613241283798. Advance online publication. <https://doi.org/10.1177/01455613241283798>
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- Werfel, K. L., Okosi, E., Grey, B., Swindale, C., & Lund, E. (2024). Understanding barriers to timely enrollment of early intervention services for children who are deaf and hard of hearing. *Journal of Early Hearing Detection and Intervention*, 9(1), 7-16. DOI: <https://doi.org/10.26077/43e9-9f6e>



# Thank you

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