Center for Deaf and Hard of Hearing **E**ducation



# Connections

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## Unilateral **Hearing Loss**

### Audiology

Listening with two ears provides awareness of direction of sound, the ability to hear in noisy situations and a good sound quality. Elevated hearing levels in one ear changes the listening experience. Unilateral hearing loss (UHL) might be present at birth, develop slowly, happen suddenly or increase over time (showing a progressive loss). Their responses may seem similar to a child with typical hearing, but there are important differences.

#### **Prevalence of Unilateral Hearing Loss**

- At birth, 1/1,000 babies are identified with a hearing loss. In Indiana, 40% of those babies were diagnosed • with a unilateral hearing loss.
- More children are identified (2.5-3%) with a hearing loss when they enter school
- Up to 25% of unilateral hearing loss progresses to a bilateral hearing loss (Lieu, 2018)

# Did you know?

### **Effects of unilateral** hearing loss

To a teacher, a child with untreated UHL may look like a student with two normal hearing ears who doesn't pay attention.

- Difficulty hearing in noise and at a distance
- More energy needed to understand speech, leading to fatigue. This negatively affects learning.
- Difficulty identifying direction of sound, leading to safety concerns
- Increased difficulty communicating with peers socially, reduced social interactions
- Social, emotional, cognitive and behavioral challenges

### How to address UHL

Children with unilateral hearing loss may be 10 times more likely to fail a grade in school or need special help to keep up in school.

- Amplification devices: traditional hearing aid, CROS system, bone conduction hearing system, cochlear implant
- Direct microphone in classroom settings: Keep in mind that this does not guarantee access to anyone speaking without wearing the device. The speaker of interest needs to repeat questions and responses from peers/other speakers in the classroom.
- Mono-headphone for streaming



- Complete questionnaires with the child and/or the child's family to identify listening challenges and get recommendations
  - 3-12 years of age: Children's Home Inventory for **Listening Difficulties** (C.H.I.L.D.)
  - 8 years +: Listening Inventory for Education— Revised (L.I.F.E.-R.)

### Learn More

- Unilateral Hearing Loss: Hearing Loss in Only One Ear by Supporting Success for Children with Hearing Loss
- Unilateral Hearing Loss in Children by American Speech-Language-Hearing Association
- Unilateral Hearing Loss: Tips for Parents by Hands &Voices)
- Unilateral Hearing Loss by American Academy of Audiology
- Unilateral Hearing Loss is Unique: by John **Tracy Center**

#### Citations

- Cunningham, R. F., & Wagner-Escobar, M. (2022). Unilateral Hearing Loss. SKI-HI 2022. Indianapolis.
- Education materials for deaf students- supporting success for children with hearing loss. Supporting Success For Children With Hearing Loss. (2023, January 14). https:// successforkidswithhearingloss.com/
- Lieu JEC. Permanent Unilateral Hearing Loss (UHL) and Childhood Development. Curr Otorhinolaryngol Rep. 2018;6(1):74-81. doi: 10.1007/s40136-018-0185-5. Epub 2018 Feb 15. PMID: 29651362; PMCID: PMC5884900
- Moats, S. (n.d.). The Clinical Conundrum of SSD. Lecture.

#### To promote, protect, and improve the health and safety of all Hoosiers

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