## Mild Hearing Loss

Mild hearing loss can be easy to miss. It might not be obvious until a child starts school, when background noise in the classroom makes it difficult to hear. A teacher might be the first one to express concern. Sometimes mild hearing loss is discovered at school hearing screenings and parents may be surprised by this new information.

## **How Does a Mild Hearing Loss Affect a Child?**

With mild hearing loss, it takes more effort to listen. A child with mild hearing loss will have to pay closer attention when listening than a child with typical hearing. This means that they have to use more of their cognitive (brain) resources to listen. If children have to use more resources to listen, it makes sense that they will have less energy for other things.

A child who has mild hearing loss may be more tired at the end of a school day than their siblings or friends. In a typical school, 65% of the day is spent listening. As a result, fatigue can have a significant impact on their learning, development, and well-being.

The impact of mild hearing loss varies widely. Some children experience little or no difficulties as a result of their hearing loss. Other children may be affected in a number of ways. Some of these ways are:

## > Soft voices may be unclear

Voices may seem unclear, especially if the speaker has a soft voice or is some distance away.

## > Difficulty hearing in noisy environments

Hearing in noisy conditions can be more difficult with a mild hearing loss than with typical hearing. This may impact how well a child hears in the classroom, such as following group discussions.

## Delayed speech and language development Mild hearing loss may result in a delay in development of speech and

language (according to research, the average delay, when it is present, is 1-2 years).

#### > Academic difficulty

School-aged children with mild hearing loss have a higher risk for educational difficulties and academic delays.<sup>1</sup> Incidental learning (learning by overhearing) may be reduced. For children with typical hearing, incidental learning is the main way to learn about new vocabulary and language. See the *Incidental Learning* article in this toolkit for more information.

#### Effects on self-esteem

Research shows that some children with mild hearing loss have lower self-esteem than children with typical hearing.

### May be accused of having "selective hearing"

Teachers may think that the child is not paying attention or choosing to not follow directions. Children with mild hearing loss may also develop problems getting along easily with others for this same reason.

## Will a Mild Hearing Loss Affect a Child's Speech and Language Development?

Mild hearing loss means that a child just starts to hear sounds when they are at a loudness level of 25 to 40 dB HL. For reference, typical hearing is defined as being able to hear sounds at loudness levels of 20 dB HL or less. Although we call 25-40 dB HL hearing loss "mild," the impact of the hearing loss in the life of a child can range from minimal to significant. Speech and language challenges can be reduced if a child with mild hearing loss receives appropriate early intervention services.

For speech and language to develop, babies and children need to hear clear speech. Babies with mild hearing loss may turn to look for voices and sounds; they may babble and begin to say words, and they may follow directions if the room is quiet and the person speaking is relatively close by. However, without

hearing aids, babies and children with mild hearing loss may miss speech sounds.

For example, in the words "sign", "time" and "fine" a child with mild hearing loss may not hear the "s", "t", and "f." They don't yet have a language base in their brain that they can use to "fill in the gaps." As a result, they may miss fragments, leading to misunderstanding. In addition, children with mild hearing loss often experience difficulty learning early reading skills such as letter/sound associations.

## Will Mild Hearing Loss Affect a Child's Academic Performance?

Children with mild hearing loss typically have difficulty understanding spoken communication in any sub-optimal listening situation, for example even with a little bit of background noise.

Hearing aids can help ensure that speech and spoken language development can develop more readily. One study found that children with 25 dB hearing loss (who did not wear hearing aids) were delayed in language by 1.2 years and those with 27-40 dB hearing loss were delayed by 2 years.<sup>2</sup> Children with mild hearing loss have difficulty hearing distant speech, for example when someone is talking from more than 2-3 feet away. Much of what babies and children learn is through "overhearing" the conversations of others. This overhearing requires the ability to hear and understand speech over a distance of more than a few feet. As a result, a child with mild hearing loss might need to focus more of her energy on listening instead of learning new concepts. Hearing aids can help children with mild hearing loss "overhear" more often. Regardless of whether or not the child is wearing hearing aids, please review the *Communication Strategies* section in this article to learn how children with mild hearing loss can be helped in their learning environments.

## What is the Psychosocial Impact of Mild Hearing Loss?

If a child is accused of "hearing when he wants to," "daydreaming," or "not paying attention," it may have a negative impact on his self-esteem. He may believe he is less capable due to understanding difficulties in the classroom. He will also be more fatigued because of the increased effort needed to listen. Children struggling with undiagnosed hearing loss often exhibit similar behavioural characteristics as those with Attention Deficit/Hyperactivity Disorder (ADHD).

#### **Similarities Between Mild Hearing Loss and ADHD**

Mild Hearing Loss	ADHD
inappropriate responses	blurting out answers before questions are completed
difficulty following directions	difficulty following through on instructions and organizing tasks
difficulty sustaining attention during oral presentations	difficulty listening to others without being distracted or interrupting
impulsive	acts on the spur of the moment
frequently asks for repetition	focuses only with frequent reinforcement or under very strict control
academic difficulty	multiple problems with schoolwork and social activities
poor self-concept	isolated and low self-esteem
doesn't complete assignments	frequently fails to finish schoolwork or works carelessly
doesn't seem to listen	"can't sit still and listen!"

The people involved in the child's life should be informed of his mild hearing loss and possible communication, safety, and psychosocial issues. The list of communication strategies should also be shared with these individuals to provide support to the child with mild hearing loss and reduce the potential occurrence of negative behavior in response to the adverse listening environment.

# What are some Special Considerations for a Child with Mild Hearing Loss?

People involved in the child's life should be informed in order to support communication, safety and psychosocial development.

When a child has hearing loss, even when the hearing loss is mild, some of the speech signal is reduced, distorted, or eliminated. If limited sound information is coming in, nerve pathways in the brain develop differently and this can limit the brain's ability to use sound for understanding.

We are learning more about the impact of mild hearing loss on long term development. The difficulty with mild hearing loss is that sometimes it's hard to see the impact of the hearing loss and benefit from hearing aids when children are very young - yet, this is the time that is most important for language development. Hearing is critical for the development of speech and language, and well-developed speech and language skills are the foundation for learning to read and write.

Children with mild hearing loss should have regular hearing evaluations to monitor their hearing. Some hearing losses can get worse over time.

## Can a Child with Mild Hearing Loss Benefit from Amplification?

Except in rare circumstances, children with mild hearing loss should use hearing aids to support normal speech and language development. Even if it's difficult to see a difference with the hearing aids when children are very young, a difference is happening in brain development, language development and understanding. Children with mild hearing loss should wear their hearing aids during all waking hours. Infants and children need a great amount of listening experience to develop solid speech and language skills. In other words, children need to hear clear speech all day long so that they can learn about their world.

When a child only uses the hearing aids 2-3 hours a day, he or she is only hearing all the sounds of speech 2-3 hours a day.

Hearing aids will also help your child to hear quiet sounds and sounds coming from a distance. This could make it easier for your child to:

- ➤ Learn from overhearing when other people are talking and interacting with each other.
- ➤ Hear soft environmental sounds, to get more information about what's happening around them.
- ➤ Hear soft speech sounds (for example, 'f', 's', 'th') more easily. This will help them understand speech more easily and to learn to make these sounds in their own speech.
- Listen to and understand conversations with less effort.

Your audiologist may also use parent, teacher or child questionnaires to help understand exactly how and when the hearing loss is affecting your child. You will be able to discuss the benefits and limitations of various device options.

## What Communication Strategies are Helpful for a Child with Mild Hearing Loss?

#### Strategies to use at home

- Gain your child's attention before speaking. Try to make sure that she is focused on listening before speaking to her.
- Face your child when speaking. Ensure your child can see your face clearly. Don't speak to your child from another room or at a distance. Keep your hands away from your face when speaking, so that your child can see your facial expression as well as the speech sounds that are visible on the face and lips (see the article on *Speechreading* in this toolkit for more information). Encourage your child to look at you while you are speaking.

- Limit excessive distracting background noise where possible. Turn off loud appliances (e.g., dishwasher, washing machine, dryer, TV, radio, etc.) when speaking or when she is working or focusing on schoolwork.
- ➤ Turn off the television to promote communication. Research tells us that when the TV is on, there is less talking and conversation between parents and their children who are Hard of Hearing.
- > Place thick curtains on the windows.
- Place carpet on the floors and sound-absorbing textiles on the walls.
- Change light bulbs or fixtures if they are buzzing.
- ➤ Ensure that the room has good lighting and is free of reflective materials and glares so that a child with mild hearing loss can see all visual cues.

#### Strategies to Use at School

- ➤ Information about mild hearing loss should be shared with the child's intervention or educational team. The team should be informed of the potential impact of mild hearing loss on development and behaviour, as well as the listening challenges she may experience in learning environments. Continual communication with the team will ensure that she is receiving appropriate and effective accommodations in her learning environment in order to succeed academically. Other personnel, more specifically an educational audiologist, should be included in the management of mild hearing loss.
- ➤ Preferential seating is critical. A child with mild hearing loss should be seated near the teacher, away from noise sources such as fans, media equipment, windows, and doorways. He should be able to easily turn and face his peers during discussions. Keep in mind that ideal seating may need to change depending upon the activity.
- ➤ Implement the buddy system. For example, older children with mild hearing loss should be allowed to copy class notes from another classmate. A younger child may benefit from a peer who can guide him or her through daily activities.

- Whenever possible, auditory (sound) information should be supplemented with visual aids (e.g., pictures, an overhead projector, or a whiteboard/SMART board) and written materials to help reinforce concepts or directions.
- > Small group or individual instruction time in a quiet environment may be beneficial.
- Reduce background noise in the environment.
  - Cover the legs of chairs and desks with felt, tennis balls, or HushUps.
  - Keep the windows and hallway doors closed.
  - Change light bulbs or fixtures if they are buzzing.
  - Turn off loud equipment (e.g., overhead projectors, computers, etc.) in the room when not in use.
  - Ensure that the room has good lighting and is free of reflective materials and glares so that a child with mild hearing loss can see all visual cues.

### **Strategies to Use in all Settings**

- ➤ Maintain eye contact. Be aware of your rate of speech; do not speak too fast or so slowly that your words are over-exaggerated.
- Ensure that you have the child's attention before speaking. Use a cue or a signal, such as a tap on the shoulder, to signify that she needs to focus on what will be said.
- Give information/instructions in short, concise steps.
- Check for understanding regularly by asking the child to summarize what was said.
- ➤ If your message was not understood, do not keep repeating it verbatim. Instead, rephrase it.
- > Turn on captioning when watching TV or movies.

- ➤ If hearing aids or assistive technology (FM or DM technology) have been recommended, encourage its routine use.
- ➤ The importance of self-advocacy should be emphasized early on. A child with mild hearing loss should be encouraged to ask for clarification if she does not understand or misses what was said. She should also be encouraged to tell the teacher if her hearing aids or assistive technology are not functioning appropriately. See the *Encouraging Your Child to Self-Advocate* article in this toolkit.
- Those involved closely in the child's life should make efforts to optimize the child's listening environment by using the strategies in the previous lists.

#### **Additional Resources**

Other articles also available from the Alberta Hands & Voices Lending Library.

Accommodations for Students with Hearing Loss, Supporting Success for Children with Hearing Loss

http://successforkidswithhearingloss.com/relationship-hl-listen-learn/accommodations

Mild Hearing Loss and Learning, Supporting Success for Children with Hearing Loss

 $\underline{http://success forkids with hearing loss.com/mild-hl}$ 

### References

<sup>1</sup>Bess FH, Dodd-Murphy J, Parker RA (1998) Children with minimal sensorineural hearing loss: prevalence, educational performance and functional status. Ear & Hearing, 1998 October 19(5): 339 – 54

<sup>2</sup>Tharpe, A.M. (2008). Unilateral and mild bilateral hearing loss in children: Past and current perspectives. Trends in Amplification, 12(1), 7-15.

Adapted from:

-Kristy Knight, Unilateral and Mild Hearing in Children: Are

**Hearing Aids Necessary?** 

-Phonic Ear

-Unilateral Hearing Loss in Children, Best Practice Guidelines for

Professionals, University of Wisconsin

-Your Child Has a Mild Hearing Loss - What's the Next Step,

**Aussie Deaf Kids**