

Supporting a **Child** with **Auditory Processing Disorder (APD) at Home**



A GUIDE FOR CAREGIVERS

WHAT IS APD? HOW DOES IT AFFECT MY CHILD'S COMMUNICATION AND LEARNING?

Auditory processing disorder is characterized by difficulties in understanding auditory information. It does not mean hearing is poor, but that the brain struggles to understand what the ears hear. This results in poor performance in one or more of the following areas: discriminating between sounds and words, recognizing sound patterns, recognizing sounds in space and time, listening to more than one sound at the same time, and determining sounds that are of differing loudness, pitch and duration. Such difficulties in processing sounds can impact a child's learning and communication because their "brain hears less" than their peers.

APD may coexist with other conditions such as attention-deficit/hyperactivity disorder (ADHD), language impairment or learning disabilities. In fact, researchers suggest that almost half of the people with ADHD may also have APD. A diagnosis of APD is not associated with any sort of hearing loss or issues with the ears themselves. Instead, it is due to a miscommunication within the hearing and processing parts of the brain.

WHAT CAN THIS LOOK LIKE AT HOME?

Families can have different ways of talking to each other- for example, how they speak, the amount of noise in the background, the language they use, the physical environments, and cultural norms. Such factors ultimately have an impact on the listener's ability to understand and communicate.

Things you may notice in your child with processing difficulties:

- Difficulty localizing sound.
- Sensitivity to sounds.
- Taking longer to respond in verbal communication situations.
- Requests for repetitions (saying "what" and "huh").
- Difficulty paying attention.
- Difficulty following complex directions or commands.
- Difficulty understanding spoken language in noisy backgrounds or in noisy environments that echo sounds, or when information is presented quickly.

This is not an exhaustive list of symptoms and behaviours, and children can present differently.



WHAT ARE COMPENSATORY STRATEGIES? WHAT CAN I DO TO HELP MY CHILD?

What does successful communication look like in your home, and what does this look like to you? You know your child best, and the environments in which they communicate successfully.

The following strategies are considered compensatory strategies because it is a way to achieve the same outcome (understanding more), but in a different way. This can be done by using different ways of communication and such strategies are as follows:

STRATEGY #1

It may be helpful to **write down** times when communication was successful – be specific!

- Include things like who was there, what was the topic, what was the setting, and what were the ‘conversation rules’ (was there turn-taking?).
- Keeping an inventory of when your child’s understanding and learning was successful in communication can help to identify ways in which you can facilitate more successful communication.

STRATEGY #3

You can try to **pre-brief** your child when giving them instructions or introducing new topics of conversation to help them understand your message.

- An example of this is to say the topic of conversation before speaking about it, “Hockey tomorrow.... We have hockey practice tomorrow night.”

STRATEGY #2

Give **one instruction** at a time.

- It can be helpful to pair a verbal instruction with a physical or visual instruction as well.
- An example of this can be ensuring the child is looking at you before you start speaking, and when instructing you can act out the task or instruction or touch your finger for each instruction.
- You can provide a verbal instruction as well as a written instruction (i.e., make a list). Try to limit the number of instructions given at one time.

STRATEGY #4

Comprehension checks are another way to ensure your child is understanding you or others.

- You can ask the child to say what they heard, and as they repeat it back to you, you can determine if there are any ‘missing gaps’ of information or something they misunderstood.



STRATEGY #5

Chunk your sentences and allow for **longer times** to process information.

- Since children with APD have difficulty understanding large chunks of information all at once or when they need to listen in noise, make sure you break up your sentences into chunks that are more easily understood.
- Allowing for time in between the 'chunks' gives the child a chance to understand what was said and be ready to hear the next part without missing anything.

STRATEGY #7

Call your child's name and wait for their attendance before speaking the rest of your sentence.

- This brings their awareness to the speaker, and ensures that they are giving you a sign they are ready to hear what you have to say (e.g., turned their head, looking at you, turned off a video or music).
- This strategy works best when you and your child are in the same room or in close proximity.

STRATEGY #9

Instill **advocacy skills** for children to feel comfortable letting someone know when they misunderstand or require repetition of the sentence.

- This can be done by letting them know that it's okay to ask someone to repeat themselves, or part of their sentence.
- One way to normalize this in the home is to ask the child to repeat themselves because you didn't 'catch all' of what they said. Supporting the child's confidence and willingness to learn is important.

STRATEGY #6

Be aware and bring awareness to **background noises**, including voices and mechanical sounds (i.e., fans or appliances, videos and music).

- Being aware of multiple sounds around you and your child can help to identify possible distracting or competing sounds that may decrease your child's ability to process more than one thing at a time.
- When we are familiar with the sounds around us, we can work to decrease these sounds wherever possible.

STRATEGY #8

Introduce **organization strategies** at home that use graphics.

- This could look like a visual chart of the weekly schedule using both pictures and words.
- When communicating a story or a problem/solution, a visual map may help your child so that they do not have to hold so many parts of information in their memory, while attempting to listen to new information.

STRATEGY #10

The final and most important strategy is for families to **understand and accept** a child's unique processing skills, and seek more information when needed.

- Acceptance is beneficial for all family members, because this fosters an environment that uses compensatory strategies consistently to increase communication and understanding for all.



WHO CAN I WORK WITH? IS THERE ANYONE I CAN REACH OUT TO?

As the child's caregiver, you know them best. So, if you feel that some things you and your family are experiencing are outside of your comfort zone, finding support from professionals is recommended. Professionals such as Audiologists and Speech-Language Pathologists are most familiar with auditory processing disorders because audiologists have an important role in diagnosing APD at the auditory perception level, and speech-language pathologists have an important role in assessing and treating APD where language and learning can be impacted. Other professionals that may be beneficial to reach out to are teachers, educational assistants, occupational therapists, psychologists and physical therapists. These professionals have education in supporting clients with sensory processing, neurocognitive skills, self-regulation, and academic difficulties. Contacting the child's education professionals to make them aware of helpful strategies that you are using at home is recommended, so that they can also implement these in the classroom environment.

Another way to become informed on APD, and what it is like to live with APD is to reach out to adults who have an APD diagnosis, as they may recommend strategies that work for them. There are online forums and parent support groups that can provide support outside of what a rehabilitation specialist can. Overall, it is important that as a caregiver, you have identified the needs of your child, and are proactive in their well-being regarding APD. What will benefit your child the most is ongoing communication and collaboration between them, yourself as a caregiver, educators, and specialists.

Feel free to visit the HearSay parent support group that provides insight, tips and information about auditory processing disorder, assessment and treatment methods across Canada.





Supporting a Child with Auditory Processing Disorder (APD) at Home



References:

American Speech-Language-Hearing Association. (2023). *Central Auditory Processing Disorder*. (Practice Portal). Retrieved October, 11, 2023, from www.asha.org/Practice-Portal/Clinical-Topics/Central-Auditory-Processing-Disorder/.

Assessment and Management of Children with Auditory Processing. (2012). In *Canadian Guideline of Auditory Processing Disorder in Children and Adults: Assessment and Intervention*. (pp. 17-32). The Canadian Interorganizational Steering Group for Speech-Language Pathology and Audiology.

Chermak, G.D, & Musiek, F. E. (2013). *Handbook of Central Auditory Processing Disorder, Vol II: Comprehensive Intervention* (2nd ed.). Plural Publishing, Inc.

Ferre, J. M. (2007). *Understanding intervention for (c)apd: As easy as A-B-C – the Asha leader*. ASHA Wire. <https://leader.pubs.asha.org/doi/10.1044/leader.FTR2.12102007.20>

Hall, J. W., & Bellis, T. J. (2008). Assessment and management of auditory processing disorders: it's real, it's here, and it's mainstream audiology. In *Audiology today* (Vol. 20, Issue 2, p. 42-). American Academy of Audiology.

Jenkinson, J., Hyde, T., & Ahmad, S. (2008). *Building blocks for learning, occupational therapy approaches: practical strategies for the inclusion of special needs in primary school*. Wiley-Blackwell.

Kruczyńska-Werner, A. (2018). The Role of Family and School Environment in Therapy of Children with Central Auditory Processing Disorder. *Logopedia*, 47(2), 313-328.

Samara, M., Thai-Van, H., Ptok, M., Glarou, E., Veuillet, E., Miller, S., Reynard, P., Grech, H., Utoomprurkporn, N., Sereti, A., Bamiou, D.-E., & Iliadou, V. M. (2023). A systematic review and metanalysis of questionnaires used for auditory processing screening and evaluation. *Frontiers in Neurology*, 14, 1243170–1243170. <https://doi.org/10.3389/fneur.2023.1243170>

Weismer, G., Story, B., & Hoit, J. (2022). *Foundations of Speech and Hearing: Anatomy and Physiology* (2nd ed.). Plural Publishing, Incorporated.

Handout Created by: Jennifer Colton and Gabriela Lopera. McMaster SLP Students, HearSay Clinical Placement October 2023.
Supervision and revisions by Yvonne M. Oliveira, Speech-Language Pathologist & Audiologist, HearSay Speech & Hearing Centre.