

What is APD?

Auditory processing disorder (APD), a neurological condition also known as **central auditory processing disorder (CAPD)**, affects the brain's ability to process auditory input, making it difficult to understand speech, follow oral instructions, or distinguish speech in noisy environments. It is the inability to understand spoken language in a meaningful way in the absence of what is commonly considered a hearing loss.

What causes APD?

There are generally 3 causes for an Auditory Processing Disorder:

- **Neurologically based cause** - there has been some type of damage or insult to the auditory regions of the brain. This can occur in utero, or during the birthing process or an accident that occurs after the child is born. Examples may include children born to drug addicts or alcoholics, those with a traumatic birth/low APGAR scores or head trauma through a fall. Approximately 5% of all cases fall into this category.
- **Congenitally based cause** - there are misshapen and misplaced cells that are strewn throughout the auditory regions of the brain to cause weaker auditory processing skills. This type of APD cause often lends itself towards a hereditary or genetic component. Approximately 60% of all cases fall into this category.
- **Developmentally based cause** - This is where there is an immature auditory nervous system possibly due to a significant history of ear infections or middle ear fluid. Approximately 35% of all cases fall into this category.

Some individuals will have a single cause for their auditory processing weaknesses while others will have a combination of causes. The central auditory nervous system is in full adult form between the ages of 12- 14 years of age. If a person is older than 14 and has an auditory processing deficit, it will generally be due to neurological or congenital factors. This means that the individual will always have somewhat weaker auditory processing skills during their lifetime.

APD is a highly treatable condition. Research in neuroplasticity (ability to change how the brain functions) indicates that brain function can be improved by the appropriate stimulation. The degree to which an individual's auditory processing deficits will improve with treatment and therapy cannot be determined in advance. Regardless of the cause, with appropriate therapy intervention, all individuals with APD can become more active listeners and be more confident in listening and learning situations.