# **AUDITORY PROCESSING DISORDER**

## What Is It?

Auditory processing disorder can be defined as "a condition in which people have trouble making sense of the sounds around them." (National Institutes of Health)

Some "hearing" problems might have nothing to do with hearing loss. They might be due instead to early childhood developmental disorders, brain changes later in life, or other health problems. The sounds you hear travel from your ears, to and throughout your brain (auditory cortex).

Changes at any point along this pathway can interfere with how you process and understand the sounds you hear. For example, you might have trouble telling the difference between words that rhyme. Diseases that affect how the brain processes information can also interfere with auditory processing. If you struggle with memory and attention tasks, you may find it harder to recognize familiar words and make sense of new sounds.

## Symptoms

- Struggling more than others to recognize or understand speech in noisy settings (for example, restaurants, social gatherings)
- Problems recognizing spoken words or keeping up with telephone conversations
- Finding it hard to tell the difference between words that sound alike
- Feeling uncertain about where the sounds you hear are coming from

### **Evaluation**

Symptoms of auditory processing disorder can also occur with other hearing problems. Testing can help to determine if symptoms are related to auditory processing disorder or not. Standard hearing tests can detect changes in our ears' sensitivity to soft sounds. For example, these tests can tell you if you have hearing loss after exposure to loud noise.

Other tests may be needed to examine your hearing, thinking, and memory, and assess how well you understand the sounds around you. Just as hearing problems can make it harder to evaluate your physical and mental health, physical and mental health problems can make it harder to evaluate your hearing.

## Possible Causes

In adults, auditory processing difficulties usually appear with other conditions such as head injury; as part of aging; related to certain brain diseases (such as Parkinson's disease); in connection to some job-related risks (noise, toxic chemicals); with certain mental health conditions; or related to some drugs that can interfere with thinking. It's a good idea to discuss all possible risk factors with your doctor.

## What Can I Do?

Symptoms of auditory processing disorder can be due to many causes and risk factors. For this reason, you should talk with your doctor first about your overall health. Your doctor may refer you to an audiologist for new or additional tests. Depending on your overall health and symptoms, you might also be referred to other specialists.

Your doctor might recommend specialists who can test for changes in your ability to process speech and language, your brain health, your middle ear and inner ear function, and/or your behavioral health.

## **Key Takeaways**

- Auditory processing disorder is not the same as hearing loss.
- Symptoms of auditory processing disorder can be due to many causes and risk factors.
- If you struggle to understand or recognize spoken words, you should talk to your doctor.

#### Learn More

https://www.ncbi.nlm.nih.gov/pubmed/32163310 https://www.ncbi.nlm.nih.gov/pubmed/23341279 https://www.ncbi.nlm.nih.gov/pubmed/26237266





