

Early years hearing loss identification and treatment

Early hearing loss can affect language development, which experts believe starts during the first months of life and continues throughout the early years. If hearing problems are diagnosed and treated quickly, babies and children can avoid trouble with language, speech, attention and more; therefore, it is essential to identify and treat a hearing loss as soon as possible. You may find out your child has hearing loss when he's born, or he might be diagnosed later in childhood.

What causes a hearing loss in children?

The most common causes for hearing loss in children are **Middle ear infections** (Otitis Media) and **Middle ear fluid**. These happen at least once in about 90% of young children, because the tubes that connect the middle ear to the nose, called Eustachian tubes, are horizontally aligned, making the ear accessible to different bacteria coming from the throat. Fluid then builds up behind the eardrum and can get infected. Even if there is no pain or infection, the fluid can affect hearing if it stays there, at least for a short time. In severe and long-lasting cases, otitis media can lead to permanent hearing loss.

Other, less common causes for hearing loss may include illnesses or injuries. Young children can lose their hearing after they get some illnesses, including meningitis, measles, chickenpox, and the flu. Head injuries, very loud noises, and some medications can also cause hearing loss, but these are much less likely to occur.

Finally, some children are born with a hearing loss, either a genetic related one or from causes related to the pregnancy or birth incidents. A baby born prematurely is at higher risk, too.

How can I know if my child has a hearing difficulty?

Since January 2010, every child born in Israel goes through newborn hearing screening process. This process is meant to discover children that were born with a hearing loss, and if so, refer them to the necessary clinics for more tests and follow up; but even if your child has passed the screening test, it is still important to pay attention to certain signs that might indicate the existence of a hearing loss; unless your child was diagnosed with hearing loss at birth, you'll probably be the first person to notice if he has trouble picking up on sounds. Some early signs of a difficulty in younger infants may include the child:

- Not reacting to loud noises
- Not responding to your voice
- Making simple sounds that disappear or fade away
- Pull or rub an ear
- Be constantly cranky for no clear reason
- Stop paying attention and have little energy
- Not understand requests/questions
- Often ask for the TV or Music to be louder

- Have a fever
- Have ear pain

In older ages, these can be accompanied by speech and articulation difficulties, attention deficits, and more.

What should I do if I suspect my child has a hearing loss?

In case you suspect your child has difficulty hearing, you should first schedule an appointment with an Ear Nose and Throat (ENT) doctor. The doctor will inspect your child's ears to make sure there are no obstructions (such as ear wax) and to try and identify the presence of middle ear fluid. The doctor should then refer you to a hearing test, conducted by a professional audiologist, who will perform the test according to your child's age and abilities. This test is performed in a quiet booth, and is meant to look for hearing reactions to different sounds in different intensities. This test is usually conducted through games and songs so to make sure the children cooperate fully.

After the test you will receive a test graph called an 'Audiogram', which will indicate the level of hearing in one ear or both, depending on age and cooperation. The Audiogram will also most likely contain recommendations for future follow-up and treatment.

What happens if a hearing loss is discovered?

If there is an indication of a hearing loss, the Audiologist and/or ENT doctor will try to determine its cause; most of the time, it will be **middle ear affiliated**.

The most common treatment for Middle Ear fluid/infections includes watchful waiting, which is sometimes combined with medications such as antibiotics. The condition often goes away on its own, so sometimes the first treatment is simply to watch for any changes and follow up with a hearing test a few weeks/months later. In cases where the problem doesn't go away and seems to be affecting your child's hearing, your pediatrician/ENT doctor may suggest that your child get ear tubes. These allow fluid to drain and can help prevent infection.

In some cases, the clinician might refer you to further consultation and treatment for other solutions, such as hearing aids or implants. These are done in specialized clinics that hold the most experienced clinicians in the field.

Either way, the most important thing to do is to get the **right treatment as early as possible**. If you understand more about the condition, you can get your child the help he needs so he can learn, play, and keep up with other kids his age.

I am a clinical audiologist with 6 years of experience in the field of hearing diagnostics and rehabilitation, in children and adults. Parents are most welcome to consult with me privately (or anonymously, if they prefer). I can be reached via email (zabotal@gmail.com) or Phone (050-6851171). Confidentiality is promised.

Chamutal Gavriel