

Hearing Loss in Children with Down Syndrome

Hearing loss is common in children with Down syndrome and can affect your child's development. Read this handout to learn the different types of hearing loss and how we screen for hearing loss.

WHAT TYPES OF HEARING LOSS **HAPPEN WITH DOWN SYNDROME?**

Conductive Hearing Loss

- This is a common cause of hearing loss.
- Sound waves have a hard time making their way through the ear canal and reaching the inner ear. The body has a microphone, called a cochlea, located in the inner ear to help you hear. If this microphone does not get sound waves, there are no sound messages that can be sent to the brain.
- This type of hearing loss can be caused by a middle ear infection, fluid in the middle ears or wax build up.

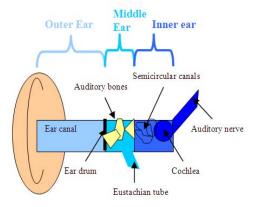
Sensorineural Hearing Loss (SNHL)

- This type of hearing loss is less common and usually permanent. It happens because of changes in the inner ear.
- Sometimes the body's microphone, called the cochlea, is not sending sound messages to the brain. Other times, the auditory nerve, which carries sound messages to the brain, is not working.
- If your child has sensorineural hearing loss, hearing aids can help.

WHY DOES HEARING LOSS HAPPEN?

The majority of hearing loss in Down syndrome is conductive hearing loss. This type of hearing loss happens a lot in children with Down syndrome because they often have the following:

- Narrow ear canals
- Serous otitis media (fluid in the middle ear)
- Smaller Eustachian tubes (these connect the middle ear to the back of the nose)



Sensorineural hearing loss is less common than conductive hearing loss, but it does happen in may children with Down syndrome. It may be present at birth, or it may develop later in childhood. Make sure to bring your child for routine hearing tests even if your child has normal hearing screening as a newborn.

HOW WILL I KNOW IF MY CHILD HAS HEARING LOSS?

- Every infant with Down syndrome should receive a newborn hearing screen. This is done before your child is discharged from the newborn nursery.
- All infants with Down syndrome have their hearing tested again at 6 months of age with a hearing test called an "audiogram."
 - If there are no concerns, your child's hearing should be tested every 6 months until normal hearing is confirmed in both ears.
 - If there are concerns, your child will be referred to an ear, nose and throat expert.
- Once normal hearing is confirmed in both ears, your child should continue to receive an audiogram every year.

If you have any feedback on this document, please contact mghfcpatienteducation@partners.org

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