

Will medical insurance cover the cost of testing?

Most insurance plans including Medicaid reimburse for genetic testing. Cincinnati Children's Hospital has in-network contracts with most of the major national insurance carriers. However, you are responsible for all copays and deductibles. All genetic tests for hearing loss will be precertified before testing. Some insurance may charge a premium if Cincinnati Children's Hospital is not part of your network. It is important that you follow the steps outlined by your insurance carriers in order to secure payment for services.

How do I schedule an appointment with a geneticist or genetic counselor?

Genetic evaluation and genetic counseling are available by calling the Division of Human Genetics (513-636-4760, option 1) at Cincinnati Children's.

You can find additional information on our website
www.cincinnatichildrens.org/hearing-loss


Division of Human Genetics
Diagnostic Laboratories

Helping you fit the pieces together



Genetic Testing for Hearing Loss Answers for parents and patients



 Cincinnati
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Is my child's hearing loss genetic?

Up to two-thirds (66%) of all children with inner ear (sensorineural) hearing loss have a genetic cause of their hearing loss. More than 100 genes tell the ear how to hear. Mutations (changes) in any one of those genes may cause hearing loss.

Sensorineural hearing loss is likely to be genetic if:

- Hearing loss is present at birth or in early childhood
- Hearing loss is related with other problems in the child
- Hearing loss affects both ears
- Hearing loss is severe to profound
- There is a family history of hearing loss

How can my child's hearing loss be genetic if no one else in the family has hearing loss?

Genetic hearing loss is related to the passage of genes which cause hearing loss through the family. Your child's hearing loss may be genetic, even if no other people in your family have hearing loss.

Genes are packets of information that tell our bodies to do the things they are supposed to do (i.e., for an ear to hear). Genes are made of a chemical called DNA (deoxyribonucleic acid). There are about 20,000-25,000 genes in our bodies. At least 100 of these genes play a role in hearing.

In our bodies, genes come in pairs. One member of each pair is inherited from a child's mother, and one from a child's father. Most of the time, both genes within a pair are nearly identical. Sometimes, a small change occurs within a gene which may be harmful. A change in one of the many genes which control the functioning of the ear may lead to hearing loss.



What is genetic testing?

Genetic testing is the complex process by which the more common genes related to hearing loss are analyzed in the laboratory. A small sample of blood (or other tissue) is needed for analysis.

We offer genetic testing for a number of different conditions related to hearing loss including:

- Nonsyndromic hearing loss
- Usher syndrome
- Pendred syndrome
- Barnichio-oto-renal syndrome
- Auditory neuropathy

About 80% of the genetic causes of hearing loss are identified by these tests. Your physician will decide which test(s) is appropriate for your child.

What are the benefits of genetic testing for my child?

Genetic test results may:

- Determine the exact cause of your child's hearing loss.
- Reduce or eliminate the need for other invasive and costly medical tests.
- Provide you with information about your child's future hearing and other potential medical complications.
- Help you and your child's physician to determine the best treatment and long-term medical management for your child.
- Provide you with information about your chance of having another child with hearing loss.

