

National  
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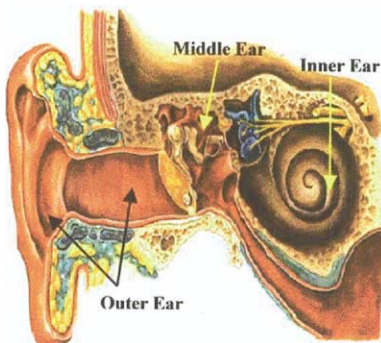
# *Family Teaching Toolbox*

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## A PARENTS' GUIDE TO FURTHER HEARING TESTING



A premature baby is being tested in the neonatal intensive care unit.



The ear has 3 parts: the outer ear, middle ear, and inner ear. Wax in the outer ear or fluid in the middle ear may cause a baby to fail the newborn screening test and need to be retested. Permanent hearing loss usually involves the inner ear.



This baby receives an ABR test as part of her follow-up visit. The second test, called a diagnostic ABR, is more extensive than the screening test done in the nursery after birth.

Your baby's hearing was screened after birth. The results show that he or she needs some special follow-up hearing tests. This guide will give you more information about the next steps.

### Why Does My Baby Need More Tests?

The screening test shows that your baby may not be hearing as well as he or she could be. More tests are needed to see exactly what the cause is and what can be done to help.

### What Might Be Affecting My Baby's Hearing?

The most common reasons that babies need rescreening is that the ear canal was not fully open, or mucous or fluid was blocking the canal during the first test done shortly after birth. If this is the case, the second test will show that your baby has normal hearing.

Some babies are born with a hearing problem. Babies who can't hear well may have a problem with the outer, middle, or inner ear. Hearing problems can also happen after birth. Some children are born with normal hearing and may develop a hearing loss later from repeated ear infections, a virus, meningitis, or other medical problems. Finding hearing problems early is important, because hearing is essential for learning and speech.

### What Do I Need to Do Now?

Remember that the first tests are simply screening tests. They are good at making sure hearing is normal. When screening tests are abnormal, more advanced tests need to be done.

The most important thing to do is to be sure that another test is done in the next 30 days. Ask if your baby needs to be seen by someone that specializes in hearing, called an audiologist.

Before you leave the hospital, make an appointment for a follow-up hearing test. Be sure the clinic has your address and a phone number where you can be reached. If you think transportation may be a problem, ask the hospital or clinic to help you arrange a ride to get to this important appointment.

Appointment Date: \_\_\_\_\_ Time: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Contact Person: \_\_\_\_\_

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# A PARENTS' GUIDE TO FURTHER HEARING TESTING



Both the ABR test and the OAE test are painless. For best results they should be done while your baby is sleeping.



The first middle ear test is performed while the baby is sitting quietly on a mother's lap. It tests how well the baby's ear drum moves.



There are many people who are trained to help children and families with hearing problems. Early care has the best results.

## What Kinds of Tests Will My Baby Receive?

The audiologist will talk with you and do a more complete evaluation of your baby. Tests will be done to see if there is a real hearing problem. The tests are not painful, can be done in the clinic, and are usually done when your baby is sleeping quietly. The tests include:

- Auditory Brainstem Response (ABR) test  
The brain's response to sound is tested by placing sensors on your baby's forehead and behind each ear and watching how the brain waves change when sounds are heard.
- Otoacoustic Emissions (OAE) test  
The inner ear's response to sound is tested by placing a small probe in your baby's ear and recording the inner ear's response to soft sounds.
- Middle-ear tests.  
Middle-ear tests check the movement of the eardrum and look at how muscles in the inner ear respond to sound.

If a hearing problem is found, the tests will show what part of the ear is affected.

## What Can Be Done to Help a Baby With a Hearing Problem?

Hearing is very important. It helps your baby learn about the world. Babies learn to talk by hearing and mimicking your speech. The earlier we find a problem and begin to help your baby's hearing, the better your baby will be able to learn. Some types of hearing loss get worse if not properly treated.

There are many things we can do to help hearing problems. The treatment depends on where the hearing loss is and how much or little your baby can hear. The audiologist will see if your baby needs a device to make sounds louder, like a hearing aid. This will help your baby hear speech sounds better. Older infants and children who are considered deaf can sometimes be helped with a special device called a cochlear implant, which helps them hear better. Many children benefit from learning sign language. They will also need special lessons to help them learn to talk.

## Where Can I Find More Information?

Make a list of questions for your baby's healthcare provider and audiologist. You can also learn more about infant hearing problems, locate hearing specialists, and learn from other parents on the following Web sites:

- [www.babyhearing.org](http://www.babyhearing.org)

This site is sponsored by Boys Town National Research Hospital and has information for parents about infant hearing concerns.

- [www.agbell.org](http://www.agbell.org)

This site links parents to other parents who have infants and children with hearing concerns.

- [www.hearingexchange.com](http://www.hearingexchange.com)

This site is led by a hearing-impaired mother of 3 who hosts information, on-line chats, and message boards of parents.