



AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

AUDIOLOGY

Information Series

Causes of Hearing Loss in Children

Hearing Loss at Birth (Congenital Hearing Loss)

The term *congenital hearing loss* means the hearing loss is present at birth. Congenital hearing loss can be caused by genetic or nongenetic factors.

Nongenetic factors account for about 25% of congenital hearing loss. Nongenetic factors that are known to cause congenital hearing loss include:

- Maternal infections, such as rubella (German measles), cytomegalovirus, or herpes simplex virus
- Prematurity
- Low birth weight
- Birth injuries
- Toxins including drugs and alcohol consumed by the mother during pregnancy
- Complications associated with the Rh factor in the blood, such as jaundice
- Maternal diabetes
- Toxemia during pregnancy
- Lack of oxygen (anoxia)

Genetic factors (hereditary) are thought to cause more than 50% of all hearing loss. Hearing loss from genetic defects can be present at birth or develop later on in life. Most genetic hearing loss can be described as autosomal recessive or autosomal dominant. Other, rarer types of genetic hearing loss include X-linked (related to the sex chromosome) or mitochondrial inheritance patterns.

In **autosomal recessive hearing loss**, both parents carry the recessive gene and pass it along to the child. Parents are often surprised to discover their child has a hearing loss because they are not aware that they are carrying a defective gene. This type of inheritance pattern accounts for about 70% of all genetic hearing loss.

An **autosomal dominant hearing loss** occurs when an abnormal gene from one parent is able to cause

hearing loss even though the matching gene from the other parent is normal. The parent who is carrying the dominant gene may also have hearing loss as well as other signs and symptoms that make up a genetic syndrome. The autosomal dominant pattern accounts for about 15% of all genetic hearing loss cases.

Genetic syndromes have a group of signs and symptoms that together indicate a specific disease. There are many genetic syndromes that include hearing loss as one of the symptoms. Examples include:

- Down syndrome
- Usher syndrome
- Treacher-Collins syndrome
- Crouzon syndrome
- Alport syndrome
- Waardenburg syndrome

Hearing Loss After Birth (Acquired Hearing Loss)

Acquired hearing loss is a hearing loss that appears after birth. The hearing loss can occur at any time in one's life, as a result of an illness or injury. The following are examples of conditions that can cause acquired hearing loss in children:

- Ear infections (very common in children)
- Medications that are toxic to the ear
- Meningitis
- Measles
- Encephalitis
- Chicken pox
- Flu
- Mumps
- Head injury
- Noise exposure

NOTES:

For more information about hearing loss, hearing aids, or referral to an ASHA-certified audiologist, contact the:



AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

2200 Research Boulevard
Rockville, MD 20850
800-638-8255

E-mail: actioncenter@asha.org
Website: www.asha.org

Compliments of

American Speech-Language-Hearing Association

2200 Research Boulevard, Rockville, MD 20850 • 800-638-8255

