

Hearing & Amplification

Causes of Hearing Loss

Glossary

Autosomes - The 22 pairs of chromosomes that contain genes that do not determine your sex. These are numbered from the largest (#1) to the smallest (#22) pairs.

Chromosome - A collection of many hundreds or thousands of genes strung together like beads on a string. There is no rhyme or reason for the order of the genes on a chromosome. Humans usually have 46 chromosomes (23 pairs) and they are found in the nucleus of each cell in your body (with the exception of the cells responsible for reproduction). One pair of chromosomes determines your sex (**Sex Chromosomes**); all the other chromosomes are called **Autosomes**. Think of a chromosome as one of a volume of books, each containing many sentences (genes). Since chromosomes come in pairs, then genes also come in pairs. This is the basis for the different types of inheritance: **Dominant** and **Recessive**.

Dominant gene (inheritance) - Since genes come in pairs, a dominant gene is always expressed (message is read) regardless of the message on the other gene.

Gene - A coded message that tells the body how to make a chemical substance that the body needs. For example, the gene that codes for the molecule hemoglobin, which carries oxygen in the red blood cells, is found in humans on chromosome #9. Think of a gene as a sentence in a book.

Hearing Loss - The condition of less than full hearing capacity. The degree of hearing loss can have different terms; hard of hearing, hearing impaired and deaf are three of the more common terms. Unless otherwise specified, hearing loss includes all of these sub-classifications.

Recessive gene (inheritance) - If paired with a Dominant gene, the message of the recessive gene will not be expressed. However, if paired with another recessive gene, then the message will be expressed.

Sex Chromosomes - The one pair of chromosomes that determine your sex. In humans, females have two "X" chromosomes, while males have one "X" and one "Y" chromosome. Therefore, human males determine the sex of the children (whether the sperm contains the "X" or "Y" chromosome).