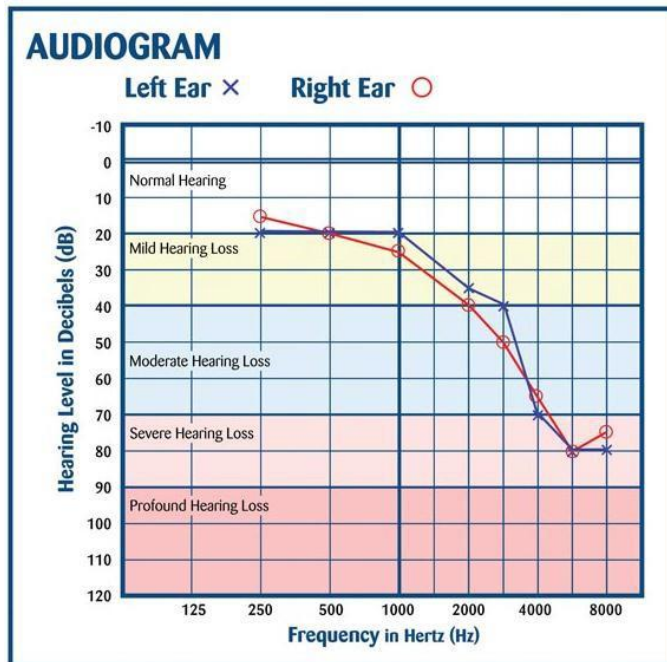




How to Read an Audiogram

What is an Audiogram?:

An audiogram is a graph to show the softest levels of sound your child can hear. It is a picture of the results of the hearing tests that are done by an audiologist. The audiogram will show two things: intensity and frequency.



Intensity (loudness)

is measured in decibels (dB) and frequency (pitch) is measured in Hertz (Hz). If your child is diagnosed with hearing loss, it is important to understand the level of loss along with the implications for speech and language. This will help to determine the services and therapies that your child may need. **By learning to read your child's audiogram, you are empowering yourself as a parent and becoming your child's biggest advocate!**

Decibels (dB):

The numbers that are located on the left side (vertical) of the graph and range from -10 at the top (the softest sounds) to 120 on the bottom (the loudest sounds). They represent sound intensity or loudness. For example, a mark on the audiogram at 50 dB means that your child did not respond to the sound until it was as loud as 50 dB.

Hertz (Hz):

The numbers that are either on the top or bottom (horizontal line) of the graph represent pitch or frequency. Just like a piano's keyboard, the pitches range from very low on the left side to very high on the right side. Your child's hearing will be tested at different frequencies and marked on the audiogram at the lowest volume your child can hear. The left and right ears are tested separately and the results will be displayed by two different lines on the audiogram.

Keep in Mind:

An audiogram gives you an idea of what your child hears in a very quiet environment and should not be interpreted as what your child may hear every day under normal, busy and noisy circumstances.

Words you may see:

- Flat: equal hearing loss across all frequencies.
- Sloping: hearing gets worse as the pitch gets higher.
- Reverse Slope: hearing loss is worse in lower frequencies, and gets better as the pitch goes up.
- Cookie Bite: hearing loss in the middle frequencies, with better hearing at low and high
- pitch.
- Asymmetrical: hearing loss is worse in one ear than the other.

Abbreviations to know:

- AC: air conduction
- AD: right
- AS: left
- AU: both ear
- BC: bone conduction
- CNT: could not test
- DNT: did not test
- HA: hearing aid
- HL: hearing level
- NR: no response
- SAT: speech awareness threshold
- SRT: speech reception threshold
- WNL: within normal limits

References:

- [Early Hearing Detection and Intervention](#)
- [How to Find the Pure-tone Average](#)
- [Boys Town National Research Hospital](#)
- [Illinois EHDl](#)

Resources:

1. [National Center for Hearing Assessment and Management at Utah State University](#)
2. Boys Town National Research Hospital:
<https://www.boystownhospital.org/> and <https://www.babyhearing.org/>
3. [American Speech-Language-Hearing Association](#)

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