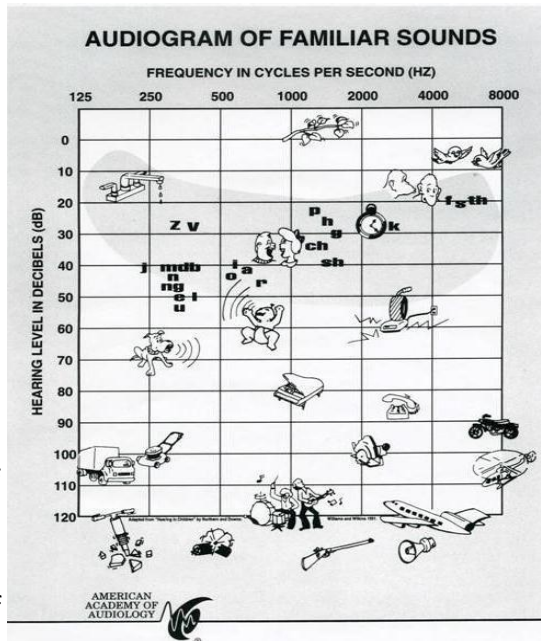




What is a Speech Banana

A Speech Banana Surrounds the Speech Sounds

A speech banana is a tool you can use to chart what your child can hear in a natural environment. The pictures on the audiogram represent the sound levels created at that particular frequency and decibel level. For example, leaves rustling is very quiet (about 5 dB) and around 1500 Hz, a moderately high pitch. A semi-truck is very loud (100 dB) and around 125 Hz, a low pitch sound. In the middle of the chart, across the frequency ranges are the speech sounds. It is called a Speech Banana because of the shape it makes when you draw a line around the speech sounds. A Speech Banana is important because it gives you, the parent, an insight as to what your child can and cannot hear.



Try This at Home:

Plot your child's most recent audiogram on the Speech Banana chart. Will they be able to hear speech sounds without amplification? Will they hear some but not all speech sounds? This can help you better understand how your child hears spoken language. As you can see by this chart, hearing sounds in the environment is not the same thing as hearing and understanding speech sounds.

dB of Common Sounds

- 10 normal breathing
- 30 whispering
- 40 normal conversation
- 70 vacuum cleaner/hair dryer
- 75 dishwasher
- 80 average city traffic
- 75 average T.V. volume
- 85 food processor
- 105 video arcade
- 115 personal headset
- 120 ambulance siren
- 115 rock concerts (in audience)

- 127 football game (in stadium)

Hearing Loss & Speech:

- **Mild 20-40 dB loss:** A child can miss 25-40% of speech sounds. Without amplification they will have difficulty hearing soft speech and conversations but can manage in quiet places.
- **Moderate 41-55 dB loss:** Without amplification, a child will miss 50-75% of spoken language, especially if there is background noise. Speech and language will be delayed without early intervention.
- **Moderate to Severe 56-70 dB loss:** A child with a loss over 56dB will miss 75-100% of speech sounds. Consistent use of hearing aids and intervention are important as there is a high risk for major delays in talking and understanding spoken language.
- **Severe 71-90 dB loss:** A child will miss 100% of spoken language. They may be able to hear very loud sounds but not be able to identify them. Hearing aids may

help a child to detect speech sounds.

- **Profound 91 dB or more:** A child cannot hear but will be aware of sound by feeling vibrations. A signed language system can give a child the opportunity for fluent communication with friends, family and their community.

References

- [Relationship of Hearing Loss to Listening and Learning Needs](#) – Anderson
- [Illinois Early Hearing Detection and Intervention Program](#)
- [Degree of Hearing Loss](#) - American Speech-Language-Hearing Association
- [How to Read an Audiogram](#) – BC Children’s Hospital

Resources

- [National Institute on Deafness & Other Communication Disorders](#)
- [American Speech-Language-Hearing Association](#)
- [Speech-Language Therapy - Kids Health](#)
- [Hands and Voices](#)

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