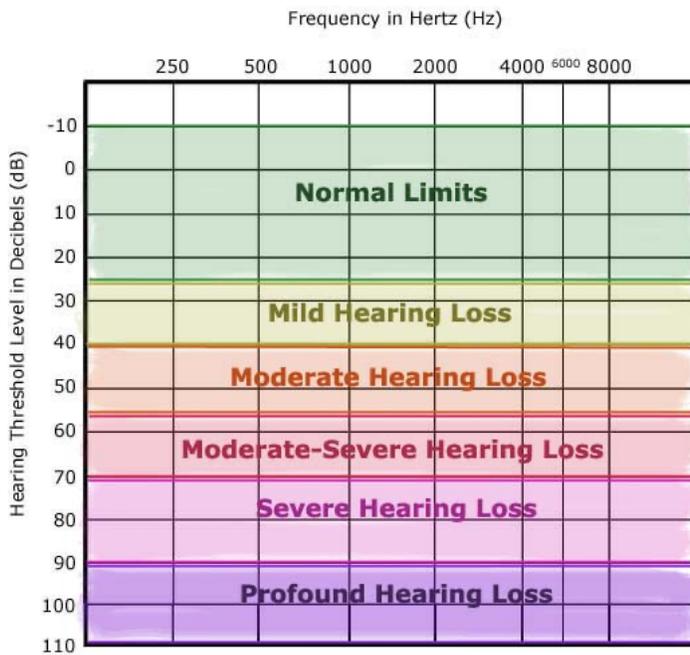


## Understanding Your Hearing Test

You just obtained your hearing test and you wish to know how to interpret it.

In a standard hearing test also called an audiogram, there are three things that are typically tested.

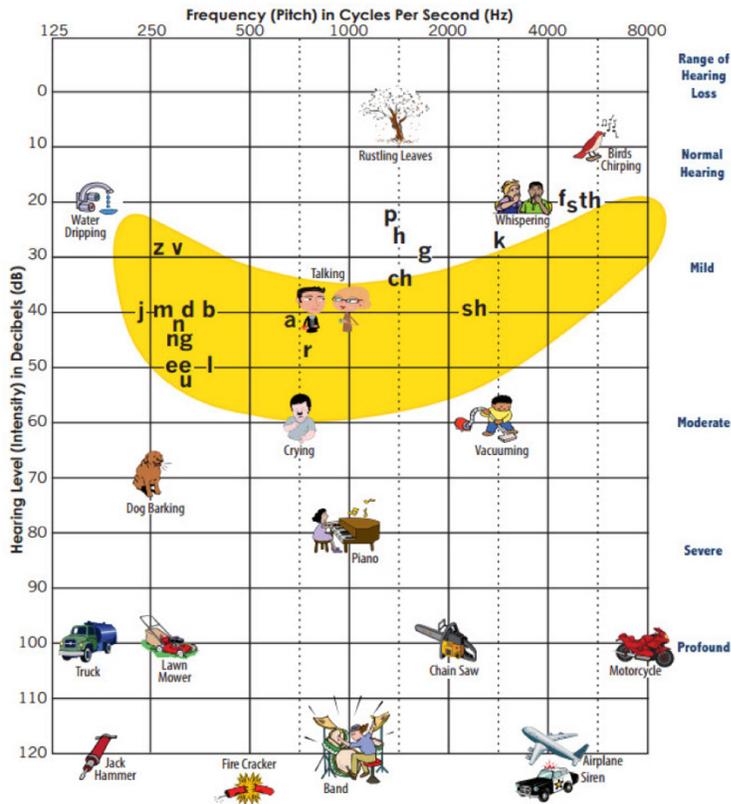
The first part involves testing how loud sounds must be for you to be able to hear them. They are reported in terms of frequency or pitch (organized from low to high pitch like the way a piano key is arranged), and volume (reported in decibels or dB). A mark is placed at the softest volume you can hear the sound with each frequency tested. 'X' refers to your left ear and 'O' refers to your right ear hearing levels when the sound is played through the ear canal. Any mark above the 25 dB mark is considered normal hearing (see figure below).



A high-frequency hearing loss is seen with aging and can be considered the 'wear and tear' of our auditory system. If you see brackets on your hearing test such as ' ] ' or ' [ ' – these refer to the hearing levels of the left and right ear, respectively, when the sound is played through the bone behind your ear. Normally, the X's and O's should overlap with the brackets, but if there is a gap between the letters and brackets, this may indicate that you have a mechanical type of hearing loss.

Below is a figure illustrating the level of loudness and frequencies of common sounds. The frequencies people use for speech are between 500 to 2000 Hz.

## Audiogram of Familiar Sounds



The second part of a hearing test involves measuring your understanding of sound. For this part of the test, your audiologist will raise the volume after he/she has determined your hearing thresholds and will ask you to repeat certain words. We quantify your speech understanding by looking at the percentage of the words you were able to repeat correctly.

The last part of the hearing test is called a tympanogram (see below) and involves measuring the movement of ear drum. A machine is used to gently blow air into the ear canal, which vibrates the ear drum. The ear drum then sends some air pressure back into the machine and we can detect how well your ear drum is moving based on those measurements as well as how well all the structures connected to the ear drum – namely your middle ear bones – are functioning.

