

Job Aid: Conducting Pure-Tone Audiometry

Script

1. Give instruction before placing headphones on patient.
2. Simple and specific.
 - a. I want you to find the softest sounds you can hear.
 - b. Press this button when you hear the tone, OR raise your hand when you hear the tone.
 - c. You will hear it the right ear or better ear.



Pure-Tone Audiometry

1. The softest intensity level at which the pure tone is heard is at 50%. A threshold is the minimum intensity or volume required to hear each frequency.
2. Follow standardized bracketing procedure.
3. Test required frequencies, each ear:
 - a. Required test frequencies (OSHA/MSHA) – 500 – 6000 Hz
Note: 8000 Hz is optional by U.S. OSHA/MSHA regulation but strongly recommended.
 - b. Required test frequencies (FRA): 500 to 8000 Hz
4. Each ear tested separately.
Note: Start test in the right ear or better ear.
5. Record results.
 - a. Left or Right
 - b. Threshold (dB HL)
 - c. Frequency (Hz)
6. Order
 - a. Frequency Order
 - i. Right ear / better ear – 1k, 0.5k, 1k, 2k, 3k, 4k, 6k, 8k Hz
 - ii. Repeat for other ear / left ear.
 - b. Starting Level
 - i. First frequency start at 30 dBHL.
 - ii. Following frequencies start 20 dBHL louder than previous threshold.
 - c. Bracketing Procedure
 - i. Decrease in -10 dB steps until no response.
 - ii. Increase in +5 dB steps until response obtained.
 - iii. Repeat until 2/3 ascending responses at softest level.
7. If “no response” at first tone presentation:
 - a. Increase by 20 dB HL up to 80 dB HL
 - b. If NR at 80 dB HL, increase by 10 dB HL
8. If NR at maximum output (100 dB HL), present 3 times, and record “NR”.
9. If response at minimum output (0 or -5 dB HL) present 3 times, and record threshold.

	Frequency in Hz					
	500	1000	2000	3000	4000	6000
Right	5	10	20	25	45	30
Left	10	10	20	30	55	40

Revision History

Revision	Date	Author	Nature of Change
0	1/5/2023	Racquel Bermudez / Anita Jones	Updated and created to job aid format