



Audiology Assessment

ID NUMBER:

FORM CODE: AUD

DATE: 04/01/2016
Version 1.0

ADMINISTRATIVE INFORMATION

0a. Completion Date: / /
Month Day Year

0b. Staff ID:

0c. Exam type:

Instructions: To be completed by study technician. The form is to be used for both the clinic exam and the home/LTCF exam. The home exam is abbreviated; the relevant sections are noted on the form.

Otoscopy results (clinic and home/LTCF exam)

1a. RIGHT

Visible Eardrum..... A

Excessive Cerumen (<50% eardrum visible) .. B

Impacted Cerumen (No visible eardrum) C

Other D

1a1. Specify Other:

1b. LEFT

Visible Eardrum..... A

Excessive Cerumen (<50% eardrum visible) . B

Impacted Cerumen (No visible eardrum) C

Other D

1b1. Specify Other:

Notes: Clinic exam: if excessive cerumen, impacted cerumen, and/or other otoscopy results found in either ear, proceed with supra aural headphones for both ears. Home/LTCF exam: always use supra aural headphones.

Headphone Selection (clinic exam)

2. Headphones Selected.....

Insert Earphones A

Supra Aural Headphones B

Ambient Noise Levels (home/LTCF exam)

3. Were ambient noise levels acceptable prior to testing?.....

Yes Y

No..... N – END FORM

Notes: Clinic and home/LCTF exam: begin with right ear if last digit of ID NUMBER is odd, left ear if digit is even.

Audiometric Results Pure-Tone Air Conduction (clinic and home/LTCF exam)

	1000 Hz	500 Hz	250 Hz	Repeat 1000 Hz	2000 Hz	3000 Hz	4000 Hz	6000 Hz	8000 Hz
Right Threshold (clinic and home)	4a1 -----	4a3 -----	4a5 -----	4a7 -----	4a9 -----	4a11 -----	4a13 -----	4a15 -----	4a17 -----
Acceptable Noise (Y/N) (home)	4a2 <input type="checkbox"/>	4a4 <input type="checkbox"/>	4a6 <input type="checkbox"/>	4a8 <input type="checkbox"/>	4a10 <input type="checkbox"/>	4a12 <input type="checkbox"/>	4a14 <input type="checkbox"/>	4a16 <input type="checkbox"/>	4a18 <input type="checkbox"/>
Left Threshold (clinic and home)	4b1 -----	4b3 -----	4b5 -----	4b7 -----	4b9 -----	4b11 -----	4b13 -----	4b15 -----	4b17 -----
Acceptable Noise (Y/N) (home)	4b2 <input type="checkbox"/>	4b4 <input type="checkbox"/>	4b6 <input type="checkbox"/>	4b8 <input type="checkbox"/>	4b10 <input type="checkbox"/>	4b12 <input type="checkbox"/>	4b14 <input type="checkbox"/>	4b16 <input type="checkbox"/>	4b18 <input type="checkbox"/>

QuickSin Results (clinic exam)

List 12 (Track 14)

- 5a. The **hinge** on the **door creaked** with **old age**..... /5
- 5b. The **bright lanterns** were **gay** on the **dark lawn** /5
- 5c. He **offered proof** in the **form** of a **large chart** /5
- 5d. **Their eyelids droop** for **want** of **sleep** /5
- 5e. There are **many ways** to **do these things**..... /5
- 5f. **We like** to **see clear weather**..... /5

List 15 (Track 17)

- 5g. **Poached eggs** and **tea must suffice** /5
- 5h. They **sang** the **same tunes** at **each party** /5
- 5i. A **gold vase** is **both rare** and **costly** /5
- 5j. **Cod** is the **main business** of the **north shore** /5
- 5k. A **round mat** will **cover** the **dull spot** /5
- 5l. A **good book informs** of what we **ought to know** /5

Tympanometry Results (clinic exam)

6. Was tympanometry completed at today's visit?

- Yes A
- No due to time constraints B – END FORM
- No due to inability to obtain hermetic seal C – END FORM

RIGHT

LEFT

- | | |
|--|--|
| 6a. Ear Canal Volume <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> | 6e. Ear Canal Volume <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> |
| 6b. Peak Static Admittance ... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> | 6f. Peak Static Admittance <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> |
| 6c. Peak Pressure <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> | 6g. Peak Pressure <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> |
| 6d. Gradient <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> | 6h. Gradient <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> <input type="checkbox"/> |



Instructions for the Audiology Assessment (AUD) Form

I. General Instructions

Prior to administering the Audiology Assessment, all examiners are to be certified by attending central training, and completing three follow-up training sessions: one on-site training walk-through with a trainer representative from Johns Hopkins, one training session with a local representative, and one follow-up demonstration of skills session that will be viewed remotely by the Johns Hopkins based team. Certification in Audiology Assessment is maintained by completing at least four sessions per month and completing quarterly review sessions with training team.

In general, since participant motivation and level of understanding can have a significant impact on performance and length of time required for testing, each component of the exam should be administered according to the protocol and in the following sequence:

- Explain the procedure to the study participant making sure to convey key points from the suggested script.
- Ask the participant if they have any questions.
- Re-explain the procedure briefly using the suggested script if necessary
- Ask the participant to perform the procedures.
- If the participant displays difficulty performing the procedures, repeat instructions.

Use the script provided to assure that all key points are covered when you describe each test and how to perform it properly. Do not provide additional description or encouragement beyond the key points provided by the standard scripts.

II. Detailed Instructions for each Item

- 0a. Enter the date on which the participant was seen in the clinic.
- 0b. Enter the staff ID for the person who completed this form.
- 0c. Enter where this is a clinic-based or home-based exam

A. Otoscopy

Otoscopy is the act of examining the participant's ear canal to ensure it is clear and free of potential obstructions of the equipment and/or sound.

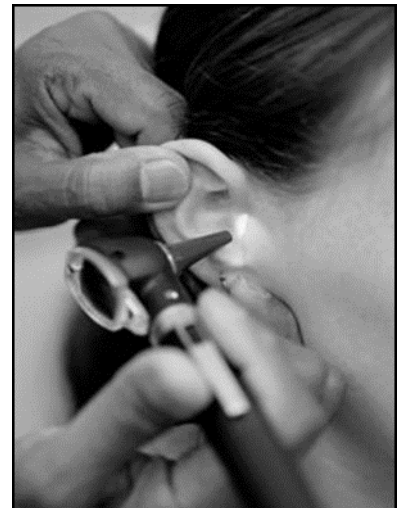
You will need: Otoscope and disposable otoscope speculum

Wash hands or use hand sanitizer prior to handling equipment or touching the participant's ear(s)

Explain to the participant: *I am going to use the instrument to take a quick look inside your ear. You will feel me gently pulling on your ear. Please sit quietly while I look.*

Ensure that hearing aids or any other obstructions of the ear canal are removed. NOTE: be aware that some participants may need to have their hearing aids re-inserted in order to understand further instructions

After assembling the otoscope with its speculum and turning it on, pull back on participant's ear with your free hand and gently insert the tip of the otoscope. Please note that some participants will require more pulling back



to open up the canal for visualization of the eardrum. Holding the otoscope like a pen, brace your hand against the participant's face to prevent jabbing the participant if they move suddenly.

See manual for more information regarding identifying eardrum landmarks and cerumen levels.

If the canal appear clear and the eardrum health, please select option A. If there is excessive cerumen and less than 50% of the eardrum is visible, select option B. If there is zero visibility of the eardrum due to cerumen impaction, select option C. In the case of other foreign objects/bodies in the ear canal, please select option D and specify the other (if possible). It is acceptable to describe 'other' object or describe it as unknown.

B. Headphone Selection (applicable only to clinic-based exams)

Headphone selection is based upon the Otoscopy results. If either 1a or 1b is B,C, or D then supra aural (over the ear) headphones will be used. If both 1a and 1b are A, then insert earphones should be used.

Do not place headphone until you are ready to complete audiometric assessment.

For home-based visits, only supra aural headphones will be used.

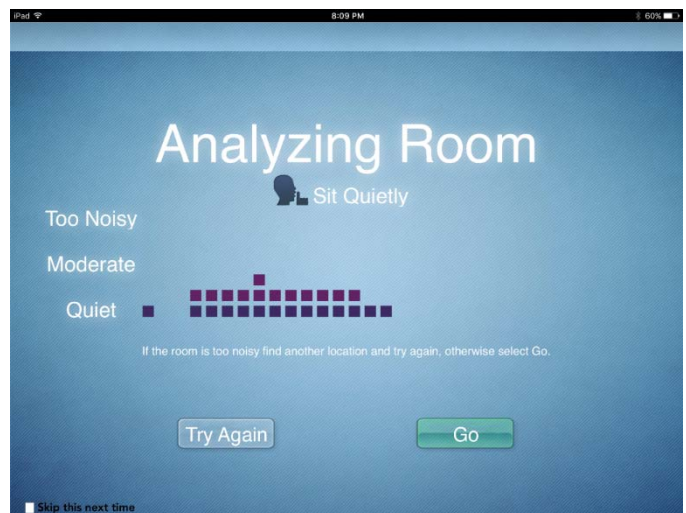
Please see manual for proper headphone placement.

C. Ambient Noise Levels (applicable only to home-based visits)

This section on applies to home-based visits using the ShoeBox portable audiometer.

See manual for more information on performing a room ambient noise level analysis. Select a quiet area of the home for testing. Prior to performing a room analysis, please ask everyone in the room to remain quiet and ensure that all sources of noise (i.e. T.V., electronics, etc) are shut down.

If the room analyzer displays any measurements above the moderate line, then noise levels are inappropriate and option B should be selected. This will also end testing as it is inappropriate to proceed.



D. Audiometric Results – Pure-Tone Air Conduction

This section applies to all visit types.

If in the clinic, ensure participant is seated in the booth so that they are facing the window where the technician is seated.

If in the home, ensure participant is seated in a chair facing away from the technician. Note: it is acceptable to have the participant's back or side facing the technician. It is important to ensure the participant cannot visualize the technician's hands on the portable audiometer or risk the participant knowing when sound is being presented based on the technician's hand movement.

For the clinic-based visit, explain to the participant: *“Now I’m going to measure how well you can hear certain sounds. I am going to put earphones inside your ear (or over your head) and you will hear beeping sounds of different pitches through them. When you hear a beep or tone, no matter how soft the sound is, please press the button for 1 second and let go. It is important that you sit still for the test. Do you have any questions for me?”*

For the home-based visit, explain to the participant “Now I’m going to measure how well you can hear certain sounds. I am going to put headphones over your ears and you will hear beeping sounds of different pitches through them. When you hear a beep or tone, no matter how soft the sound is, please raise your hand briefly and then lower it. We will start with your right ear. It is important that you sit still for the test. Do you have any questions for me?”

Ensure the participant has no questions, place the headphones and proceed with testing. Please see manual for instructions on audiometric testing.

Proceed first with 1000 Hz as per manual instructions. **Remember that the first ear tested will rely on the last digit of the participant’s ID number (odd = right ear first, even = left ear first).** Once threshold is obtained, record the value in the appropriate box 4a1 for right, 4a2 for left. Note that threshold is based on the decibel level along the y-axis.

Proceed with the following frequencies. The technician may continue to record the values as they test, or simply save them to the screen.

Upon completing testing, record the appropriate levels in the appropriate box.



In the example screen above, the following values would be recorded in the right ear:

	1000 Hz	500 Hz	250 Hz	Repeat 1000 Hz	2000 Hz	3000 Hz	4000 Hz	6000 Hz	8000 Hz
--	---------	--------	--------	-------------------	---------	---------	---------	---------	---------

Right (clinic and home)	4a1 030	4a3 030	4a5 020	4a7 035	4a9 040	4a11 045	4a13 045	4a15 050	4a17 050
-------------------------------	-------------------	-------------------	-------------------	-------------------	-------------------	--------------------	--------------------	--------------------	--------------------

Note that the 4a1 box is different from the 4a7 box, in this scenario, we are assuming that the participant changed their threshold on their repeat of 1000 Hz. Changes within 5-10 dB are completely appropriate and expected during testing.

Please see manual for more information on conducting audiometric testing.

E. QuickSin Results (applicable only to clinic-based exams)

If in the clinic, upon completing the audiometric air-conduction testing, proceed with QuickSin testing.

Use the talk-over button (outlined in manual operations section) to tell the participant to relax while you prepare the next portion of the exam.

See manual for setting up the QuickSin test. Ensure the appropriate tracks are selected.

When ready, explain to the participant, *“You will now hear several sentences with some background noise that sounds like a noisy restaurant. Repeat each sentence the woman says. It will become increasingly difficult to understand the woman’s voice, but please guess and repeat as much of each sentence as possible.”*

Ensure the participant understands the instructions and doesn’t have any questions and proceed with testing.

Proceed with the first sentence and wait for the participant to repeat the sentence back. Record the number of bold words that the participant repeats correctly. For example, using the first sentence for 5a. If “**The hinge** on the **door creaked** with **old age**” is presented and the participant repeats back “The **hinge** on the **door** cracked with **old** sage” then 3 out of 5 are correct and a 3 is recorded in box 5a.

Continue with testing.

Note: Give the participant ample time to repeat the sentence and encourage guessing if they do not repeat. The sentences will only be presented after the technician records the correct value on the screen.

F. Tympanometry Results (applicable to clinic-based exam only)

Note that this test is only applicable if time is available during the clinic exam and the tympanometer is able to obtain a hermetic seal. If applicable, record the reason that tympanometry is not collected in item 6.

See the manual for instructions on setting up the tympanometry test.

Once ready, ensure headphones/earphones are removed from the participant’s ears.

Explain to the participant, *“I am now going to take a brief measurement of your ear. I will place this soft tip in your ear and you will hear a buzz. Please sit still and remain quiet while I complete this test. It will only take a few seconds per ear.”*

The tympanometer will run as soon as a hermetic seal is obtained.

Record the tympanometry results in items 6a-6d (right ear) and 6e-6h (left ear).

6a. Ear Canal Volume..... . 6e. Ear Canal Volume

6b. Peak Static Admittance... . 6f. Peak Static Admittance

6c. Peak Pressure 6g. Peak Pressure..... .

6d. Gradient..... . 6h. Gradient..... .