

Practice Exercise #2



Step 1: Get Familiar with Your Equipment

1. View **OAE Video Tutorial Modules 5 – 7**.
2. View the brand-specific OAE Equipment Quick Use Video and view/print the Quick Use Guide for your equipment at www.kidshearing.org/oae-equipment-quick-instructions.
3. Determine from the orientation Quick Video, Quick Guides, or your own equipment manual if there are any adjustments you need to make when screening an ear with pressure equalization (PE) tubes.

No ___ Yes ___ (note what you have to do): _____
4. Assemble your equipment (attach probe cord to screening unit and identify how the equipment is powered/charged).

Follow the “**Start Screening**” and “**Complete Screening**” sections of the **OAE Screening Skills Checklist** found at the end of this handout as you engage in the practice activities outlined in Steps 2 – 4 below.

Step 2: Screen Yourself

Conduct a screening on your own ear using an adult-size probe cover. As the screening proceeds, watch the unit display for a result or an error message and complete the appropriate next step. Remember, if you get a non-passing result, check the probe tip to make sure it is not blocked with wax, re-insert, and attempt the screening again. You may also need to experiment with a different size probe cover to get a snug fit. After getting a result, screen the other ear. Repeat this process until you are comfortable with all steps and record your final result:

My Right Ear: Pass ___ Refer ___ Error message _____

My Left Ear: Pass ___ Refer ___ Error message _____

Step 3: Screen Other Adults

Using the **OAE Screening Skills Checklist** as your guide, conduct a screening on the ear of another adult. Ask the person you are screening to remain still and quiet. As the screening proceeds, watch the unit display for a pass or refer result, or an error message, and complete the appropriate next step. Screen a variety of adults (at least four individuals) until you are confident in your skills and can easily recall the screening sequence. Record the final results:

Adult 1	Right Ear: Pass ___	Refer ___	Error message _____
	Left Ear: Pass ___	Refer ___	Error message _____
Adult 2	Right Ear: Pass ___	Refer ___	Error message _____
	Left Ear: Pass ___	Refer ___	Error message _____
Adult 3	Right Ear: Pass ___	Refer ___	Error message _____
	Left Ear: Pass ___	Refer ___	Error message _____
Adult 4	Right Ear: Pass ___	Refer ___	Error message _____
	Left Ear: Pass ___	Refer ___	Error message _____

Step 4: Probe Fit Practice Activities

Complete the following activities while screening yourself, other adults, or a combination of the two.

- a. **Observe the effect of movement.** Initiate the screening process. Have the individual being screened move and shake his/her head to see if the probe can be dislodged through movement. Ideally, a well-inserted probe will stay in place even during a modest amount of head movement. Watch the display screen, noting how the screening process often slows down, or even stops, during periods of movement and continues again once the movement ceases. Inspect the probe to see if it remains snug in the ear canal or if it has become loose. Movement is actually one kind of internal “noise” so you may see messages indicating noise or prompts to check whether the probe is in the ear. On the other hand, if you have a good probe fit, the screening may proceed and provide a result. Of course, if you get a non-passing result, you will want to minimize head movement and repeat the screening. **Note: Never attempt to hold the probe in the ear as this tends to push it up against the ear canal wall and can prevent an accurate screening.**

Conclusion: *Good probe fit is critical because many children will move their heads to some extent during the screening process. Head movement needs to be minimized because it can interfere with the screening process. Even with head movement, you may be able to obtain a passing result and that result is valid. If you get a non-passing/refer result, however, minimize movement, ensure good probe fit, and repeat the screening.*

b. Observe the effect of internal noise. Initiate the screening process and have the person being screened start to speak, counting loudly from 1 to 10. Watch the display screens and note how noise affects the screening process. You can also experiment with having the person cough, laugh, eat a cracker or make sucking sounds, in each case noting how the screening proceeds. In some cases, the process will take longer, but the screening may still be completed. In other cases, the internal noise may cause the screening process to stop altogether resulting in an error message related to noise or probe placement. If you receive a non-passing/refer result, without touching the probe, repeat the screening in silence to see if a passing result can be achieved.

Conclusion: *Always try to minimize internal noise. Even with internal noise, you may be able to obtain a passing result and that result is valid. If you get a non-passing/refer result, however, minimize internal noise, ensure good probe fit, and repeat the screening.*

c. Observe the effect of external noise. Initiate the screening process, then clap your hands repeatedly near the probe or else attempt to screen where people are talking or laughing loudly. Watch the display screens for the same effects described in the exercises above.

Conclusion: *Always try to minimize external noise. Even with external noise present, you may be able to obtain a passing result and that result is valid. If you get a non-passing/refer result, however, minimize external noise, ensure good probe fit, and repeat the screening.*

Answers to commonly asked questions:

1. If there is movement or some internal or external noise and the result is a pass, do I need to rescreen?
Answer: No. A passing result is valid. Even though conditions were not ideal, the inner ear emissions were present and strong enough for the screening unit to pick them up.
2. Will the equipment be able to tell me exactly what is causing the screening process to slow down or stop?
Answer: No. Error messages are not always accurate in pinpointing a problem. In some cases, you may not see an error message and the equipment will simply show a refer result. Any time you get an error message or a refer result, always try to rescreen the ear and improving probe fit while minimizing movement, internal and external noise.
3. If an adult doesn't pass the OAE screening, what does that mean?
Answer: As we get older, our inner ears typically produce fewer otoacoustic emissions. It is not unusual for older adults to have a refer result, even with normal hearing levels. However, a refer result could also mean that a hearing loss is present. If there are concerns about hearing (such as difficulty understanding speech in moderately noisy environments like restaurants) an evaluation with an audiologist should be completed.

OAE Screening Skills Checklist

✓Preparation

- Parents informed about OAE screening (parent letter)
- Adults (teacher, caregiver, parent, etc.) prepared to assist with screening
- Posters and “Listen Up” DVD provided to introduce children to screening

✓Set-up

- Appropriate environment selected or created
- Appropriate distracters (quiet toys) available
- All screening materials and supplies available
- Equipment functioning properly
- Hands sanitized per program’s universal precautions policy

✓Child Management

- Playful, positive rapport established with the child
- Child positioned/re-positioned to facilitate screening
- Child quietly told (not asked) what the screener is going to do
- Visual or tactile distracters used, as needed, to engage child
- Assistance enlisted to distract child and/or re-direct behaviors

✓Start Screening

- Visual inspection of outer ear
- Remote probe assembly clipped to back of collar
- Screening unit turned on
- Tip placed properly on probe, pressed down all the way to probe base
- (Foam tips only) Tip formed into mushroom shape, away from probe opening
- Outer ear pulled back during probe tip insertion
- Probe inserted with angle toward the nose, then angled back
- Hands removed from ear and probe after insertion

✓Complete Screening

- Appropriate probe fit achieved (may require reinsertion of probe or different size)
- Correct buttons pushed to proceed quickly through the screening process
- If “refer” result, probe removed, checked for earwax, and re-inserted snugly
- If other non-passing result, equipment, environment, and/or screening conditions checked and adjusted prior to additional screening attempt.
- Probe removed by grasping the probe, not the cable
- Probe tip and nozzle checked for earwax blockage, replaced if needed, and other ear screened
- (Foam tips only) Tip removed by grasping plastic tubing, not foam material
- Used probe tip(s) placed in bag or container for disposal

✓Documentation

- Visual inspection outcome documented
- Screening outcome documented after completion of screening for each ear
- Appropriate follow-up step(s) identified



Supplies:

- Screening equipment (fully charged or extra batteries, as needed)
- Probe tips/covers (adult & pediatric sizes)
- Quiet toys/distractors
- Hand disinfectant
- Bag for used probe tips
- OAE Hearing Screening documentation forms
- Pen
- Flashlight (if screening in low light during naptime)
- Reward stickers