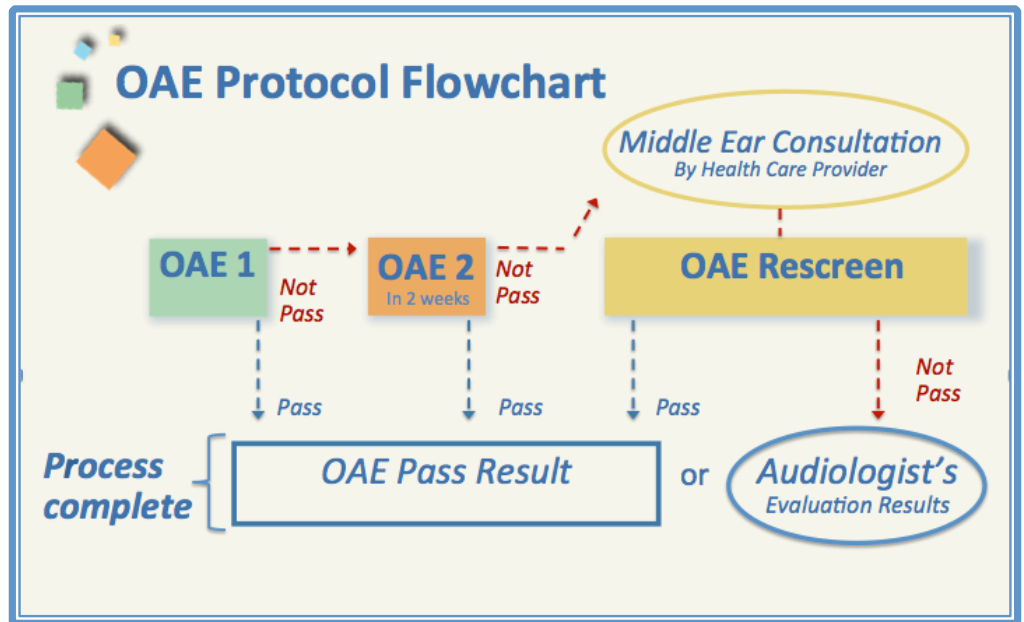
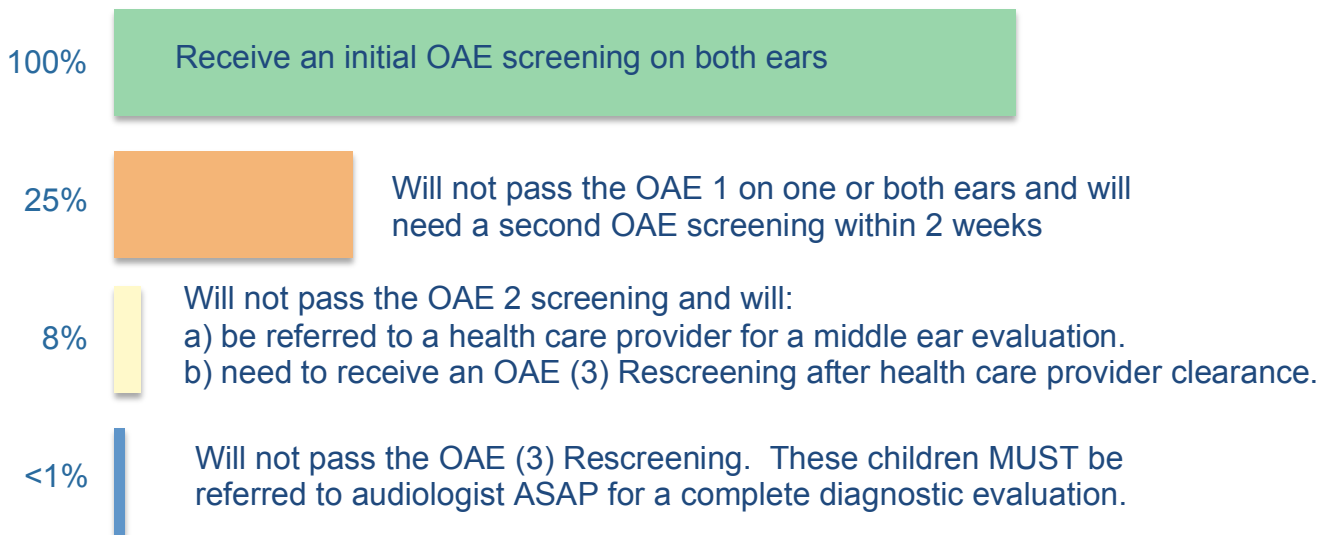


## Recommended Otoacoustic Emissions (OAE) Screening & Follow-up Protocol (Education Setting)

A good way to get an overall understanding of the OAE screening and follow-up protocol is to visualize the steps as a Flowchart.



It is important to note that **the majority of children will need only an OAE 1 screening**. The approximate percentages of children who are likely to need subsequent steps in the protocol are as follows:



A more detailed understanding of the protocol is illustrated below. It shows how the OAE probe is sending a signal into the ear and the ear's response under a variety of conditions.

If you get a **PASS** on the OAE screening, it means that the sound stimulus traveled from the probe to the inner ear and that the inner ear responded by sending an otoacoustic emission back to the probe.

Screening is **complete** for that ear.

If an ear does **NOT PASS**, further investigation is needed:

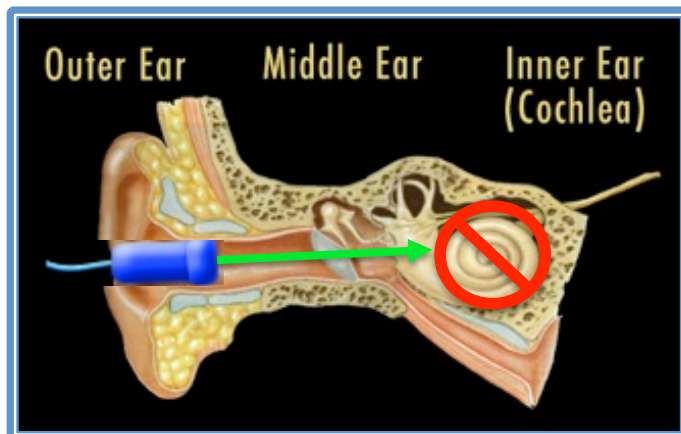
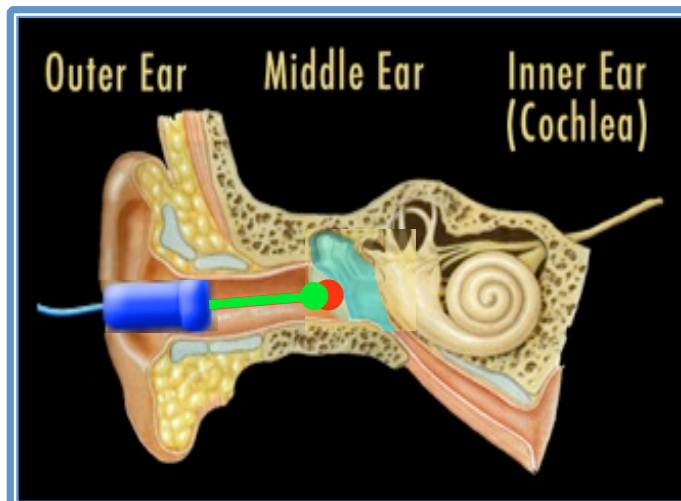
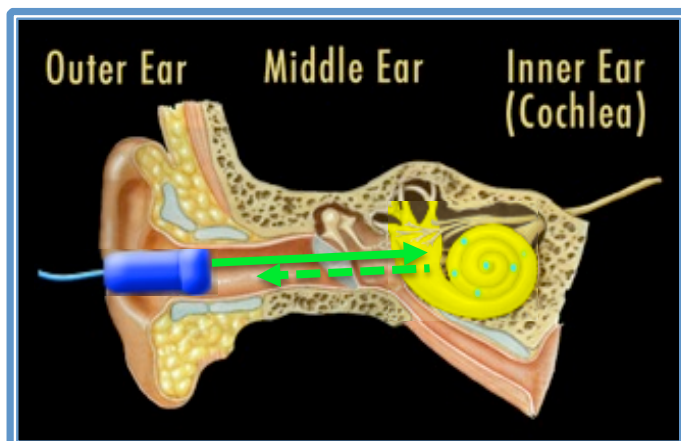
- **SCREEN** again (OAE 2) in two weeks in case the first result was due to screener error or a temporary condition (like a head cold).

If the ear still does **NOT PASS**:

- **REFER** the child to a Health Care Provider who can check whether a common problem, such as blockage in the outer ear or fluid in the middle ear (otitis media) is present. These conditions may block the sound stimulus from reaching the inner ear or the OAE response from returning to the probe. Medication or treatment may be necessary.
- **RESCREEN** (OAE 3) the ear after medical clearance.

If you get another **NOT PASS**:

- **REFER** the child to a pediatric audiologist who can evaluate whether a permanent hearing loss is present.



The OAE screening and follow-up process is **COMPLETE ONLY** when:

- Both ears **PASS** the OAE Screening, or
- An **AUDIOLOGICAL EVALUATION** has been completed and you have received the diagnostic results.

As a quick “next step” reference for any individual child, refer to the tables below:

### Visual Inspection and Case History

If the ear:	The next step is to:
<b>PASSES</b> the visual inspection...	<b>Document the outcome and proceed with the OAE screening.</b>
<b>Has pits, skin tags or other minimal malformations</b> , which do not affect the ear canal opening...	<b>Proceed with the OAE screening.</b> If the ear does not pass the OAE screening, make a direct referral to a health care provider. Otherwise, note the abnormality in the child’s health record and share this with the health care provider along with the OAE results.
<b>Has a blockage of the ear canal, signs of an infection or a significant malformation of the ear...</b>	<b>Refer to medical follow-up.</b> Proceed with the OAE screening only after obtaining medical clearance from the health care provider.
<b>Has a PE Tube...</b>	<b>Adjust screening equipment</b> , if your model of equipment requires this, and proceed with the OAE Screening. The ear should pass if tubes are functioning properly.

### OAE (1 and 2) Screening in Detail

Each ear is screened independently; whenever one does not pass, proceed to the next step for that ear.

If the ear:	The next step is to:
<b>PASSES</b> the OAE screening...	Assume that the <b>middle ear and inner ear are functioning properly</b> (also true for children with PE tubes). Unless there are additional concerns about the child’s hearing or language development, no further action needed until the next periodic screening.
<b>DOES NOT PASS</b> on the <b>first</b> attempt during a screening session...	Check the probe tip and opening to make sure it is not blocked with wax; <b>select a different size tip</b> , if needed, <b>refit the probe and try the OAE screening again, making sure the environment and child remain relatively quiet.</b>
<b>DOES NOT PASS</b> after <b>multiple attempts</b> during the 1st OAE screening session...	Conduct 2nd OAE Screening session within 2 weeks. <ul style="list-style-type: none"> <li>▪ If the ear <b>PASSES</b> during the 2nd OAE screening session, assume that both the middle and inner ear are functioning properly. No further action is necessary until the next periodic screening.</li> <li>▪ If the ear <b>DOES NOT PASS</b> after multiple attempts during the 2nd OAE screening session, <b>refer the child to a health care provider for middle ear evaluation.</b></li> </ul>

### OAE (3) Rescreening After Medical Referral in Detail

Programs should communicate with medical providers and work together to determine the optimal time to rescreen as per the provider’s diagnosis and treatment plan. **Rescreening after medical clearance is extremely important.** The OAE equipment is able to screen the inner ear **ONLY** when the pathway through the outer and middle ear is clear.

If the ear:	The next step is to:
Is medically “ <b>cleared</b> ” (infection, fluid or blockage not present or resolved)...	Conduct the OAE Rescreen immediately.
Is <b>treated for otitis media/middle ear fluid</b> ...	Conduct the OAE Rescreen approximately 2 - 3 weeks <u>after antibiotic treatment has been completed</u> , allowing time for the fluid to dissipate. If the child is referred to an Ear Nose and Throat (ENT) specialist, receives PE tubes, etc., discuss with the ENT whether a hearing test (Visual Reinforcement Audiometry [VRA], Auditory Brainstem Response [ABR], Conditioned Play Audiometry [CPA] or OAE) was conducted at the conclusion of treatment and if the child passed. If not, discuss with ENT when to conduct an OAE Rescreen (usually about 1 week after PE tube placement, for example).
Is <b>not examined</b> by provider because parents do not follow up...	Conduct OAE Rescreen in 2 weeks.

If the ear:	The next step is to:
<b>PASSES</b> the OAE Rescreen (or other hearing test)...	Assume that the <b>middle ear and inner ear are functioning properly</b> (also true for children with PE tubes). Unless there are additional concerns about the child’s hearing or language development, no further action is needed until the next periodic screening. If a child has chronic otitis media, more frequent monitoring may be needed.
<b>DOES NOT PASS</b> the OAE Rescreen...	Refer to a pediatric audiologist for a complete evaluation.