

# Play Audiometry

## Ages

Children who are difficult to screen due to age or developmental level

## Purpose

To obtain valid results with very young children (ages three to four years) or those children who have difficulty with standard pure tone audiometric methods

## Description

A modification of standard pure tone screening; play audiometry conditions the child to respond to the sound by placing a toy in a container, rather than raising their hand

## Equipment

Pure tone audiometer, stickers, and small child-safe toys such as animals, airplanes, cars, clothes pins, nested boxes, or pegs and pegboard

## Facilities

Appropriate size table and chairs in a quiet, comfortable setting with limited distractions

## Procedure

1. First, practice without the headphones on.
2. Lay headphones on the table, facing the child, with audiometer set at 2000 Hz and maximum dB level to ensure tone is audible.
3. Hold the toy near your ear; assume a “listening” attitude and present tone.
4. Indicate through facial expression the sound was heard and then drop the toy in a container, such as a pail; repeat as often as necessary until the child shows interest.
5. Offer the toy to the child and place your hand on theirs to guide the first responses; encourage the child to wait until they hear the sound.
6. When the child appears ready, present the sound and guide the child’s hand to put the toy in the container.
7. The child may give consistent responses after only one demonstration or may need several demonstrations to respond on their own.
8. Once the child understands the play audiometry technique use the audiometric procedure as described in the pure tone audiometry screening section.
9. Reward the child with praise after initial responses. If this is not effective, a tangible reward like a sticker may be given.
10. If the child still is unable to do the screening after re-instruction, stop and document “unable to screen.”

## Considerations

- The tone to response time varies between children; some children will drop the toy as soon as they hear the tone; others will wait until the sound goes off before dropping the toy.
- If the child does not accept the headphones, the screener should try putting them on for only one or two seconds, removing and rewarding the child. Slowly increase the time with the headphones on.
- A timid child will often benefit from watching other children successfully complete the screening.
- If the child is *unable* to screen, refer to [Rescreen and REFER \(www.health.state.mn.us\)](http://www.health.state.mn.us).

## PASS

Same recommendations as pure tone audiometry screening: a child who responds to all tones in each ear does not require rescreening or referral.

## Rescreen

If you work in a clinic setting:

- If the child does not respond to one or more sounds, perform an immediate rescreen. If the child still misses one or more tones, refer to health care provider for immediate evaluation of the middle ear.
- If the child has factors which might impact hearing (fluid in middle ear, ear infection, etc.), then rescreen after the middle ear condition is cleared or in 8 – 10 weeks.

If you work in a community setting:

- If the child does not respond to one or more sounds on the immediate rescreen, schedule the child for pure tone audiometry rescreening in 14 to 21 days

## REFER

If you work in a clinic setting:

- If the child has no visible middle ear condition, refer to audiology for immediate evaluation of hearing.

If you work in a community setting:

- Refer to the [Rescreen and REFER criteria \(www.health.state.mn.us\)](http://www.health.state.mn.us).

\*The 500 Hz tone may be eliminated when the environmental noise level is too high based on the Environmental Noise Level Check.