

# Vision and hearing screening for school-age children

Key messages: Hearing and ear health in children

## Lesson one: Hearing in children

Children with hearing loss have difficulty hearing or recognizing sounds. Children can experience hearing problems of different levels of severity, from mild to profound hearing loss. A child with mild to severe hearing loss cannot hear as well as other children. A child with profound hearing loss in both ears may have very little or no hearing. This is called 'deafness'.

Most hearing difficulties can be prevented, treated or helped with assistive products and/or rehabilitation.

#### Lesson two: Ear health

All parts of the ear must be healthy and function properly for normal hearing. When screening it is important to check outside and inside the ear.

Recognising what healthy ears look like and knowing the signs of possible ear health problems is essential for sensory screening. Ear health problems can be caused by:

- Blocked ears
- Ear infections
- Lifestyle and environmental risks.

## Warning

Identifying ear health problems early is important. If untreated, ear health problems can lead to the need for surgery and can result in permanent ear damage.

## Signs of healthy ears

Part of ear	Signs of health	Image
Pinna	<ul> <li>No signs of damage/injury, swelling, discharge or change in colour</li> <li>Pinna is present.</li> </ul>	
Ear canal	<ul><li>Ear canal is present</li><li>Ear canal is not blocked</li><li>No swelling or redness.</li></ul>	
Eardrum	<ul> <li>Clear (partially see-through)</li> <li>White/light grey colour</li> <li>No holes.</li> </ul>	

#### **Lesson three: Preparing for screening**

## Before the screening day

Step	Actions	Image
1. Check equipment	Check you have all the necessary equipment and that it is in working order. Equipment includes:  • Audiometer  • Headphones  • Otoscope.	

## On the screening day

Step	Actions	Image
1. Set up the space	Arrange the furniture and equipment for the ear and hearing screening. Check the background sound levels.	
2. Prepare the children	Explain the screen to the children and show them the equipment.	

## Lesson four: Hearing and ear health screen

The Screen form will support you to carry out a hearing and ear health screen with each child, record results and make a plan to support their needs.

If the child completes a vision screen first, their consent and their pre-screening questions will already be recorded.

# **Hearing screen**

Hearing is screened using audiometry. During the screen, the child will listen to sounds through headphones and show which ones they can hear.

## Practice the hearing screen

Make sure the child understands the screening process by practicing with them first.

- 1. Set the sound frequency at 1000Hz, and the loudness at 40dB.
- 2. Starting with the right ear, ask the child if they hear the sound.
- 3. Record the result.

Result	Action
If the child responds.	Record <b>Yes</b> result and continue.
Lift the child does not respond after three attempts	Record <b>No</b> result and move on to the ear health screen.

Only continue to full hearing screen if a child has Yes for both right and left ears.

## How to carry out a hearing screen

The process for carrying out a hearing screen is explained in the Screening checklist.

Hearing is screened in both ears at:

- 1000Hz and 20dB
- 2000Hz and 20dB
- 4000Hz and 20dB.

Hearing screen steps	Image
<ol> <li>Start with the right ear. Play the 1000Hz frequency.</li> <li>Present the sound three times.</li> <li>Record if the child can or cannot hear the sound.</li> <li>Repeat steps 2-3 for each frequency.</li> <li>Repeat the process for the left ear.</li> </ol>	

Result	Action
Two or more ticks for each frequency for both ears.	Pass
Less than two ticks for any frequency for either ear.	Refer to ear care personnel

#### Ear heath check

To check a child's ear:

- 1. Always wash and dry your hands with soap or sanitizer gel before and after every ear health check.
- 2. Use an otoscope to look closely at the outside and inside of the ear.
- 3. Record the result using the Screen form.

Result	Action
Both ears are healthy.	Record result and continue
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#### Plan

After completing the sensory screen for vision and hearing, record the plan.

Result	Action
Did not attend	If a child is absent on the day of screening complete the 'did not attend' section of the plan and tick reschedule screening.
Passed all results	Select passed all results in the Plan section if a child has a Pass result for all:  Vision screen  Eye health screen  Hearing screen  Ear health screen.

Result	Action
Refer result for any	Discuss need to F Refer with parents/caregivers if a child has a F Refer result for any of the following:
	<ul> <li>Pre-screening questions</li> <li>Vision screen</li> <li>Eye health screen</li> <li>Hearing screen</li> <li>Ear health screen.</li> </ul>
Parent/caregiver has concerns	If a child has a Pass result and their parent/caregiver had concerns about their child's vision or hearing in the pre-screening questions:
	<ul> <li>Discuss the results with the parent/caregiver</li> <li>Explain that their child passed the vision and hearing screen and offer a follow up screen within one month.</li> </ul>
Child already has spectacles or hearing aids	If a child who already has spectacles or hearing aids has a 🗐 Refer result, ask parent/caregiver to take child to their existing service provider.
Follow up referral list	The school coordinator notes the details of any child who has a 🗗 Refer result in the follow up referral list and shares the list with the screening coordinator.