

How is hearing tested in young children?

For many Aboriginal and Torres Strait Islander children, ear and hearing trouble starts before they turn two. It's a time when they are learning to listen, yarn and communicate.

These skills are important for building relationships, learning culture and learning in school.

It can be hard to tell if kids' listening and talking skills are growing well. Knowing how ear health and hearing is assessed in kids can help you talk with parents about the importance of ear health and the need for hearing tests. It's important to know that these tests are both simple and easy to do.

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Step One: Check ear health

The first step is to take a case history to check on overall health and ear health in particular, for example if the child has had any ear, nose or throat infections in the past.

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Step Two: PLUM and HATS

This is followed by the Parent Evaluated Understanding Listening Measure (PLUM) and Hearing and Talking Scale (HATS).

These assessments are based on asking a series of pre-determined questions to understand how children hear things at home.

Having this yarn helps to find out if the parent or carer has any hearing concerns and to check the child's overall development and wellbeing. That is why it is very important for parents or carers to be involved, not just teachers and/or health workers.

The PLUM questionnaire assesses a child's perceived hearing ability and the HATS questionnaire assesses their perceived speaking ability. They can be used in combination to assess the child's overall communication skills.

For more information on PLUM and HATS, including a step-by-step guide, checklists and score forms and a yarning at home resource visit: <https://plumandhats.nal.gov.au/download-plum-and-hats/>

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Step Three: Examination

The next step is a visual examination of the child's ear by the health professional to check their ear health, for ear wax and any problems. This is done using an otoscope, a tool which shines a beam of light into the ear to help visualize and examine the condition of the ear canal and eardrum.

The function and movement of the child's eardrum and middle ear will also be tested. This simple test is called Tympanometry.

4 Step Four: Hearing test/check

This is followed by a hearing test. The type of test will depend on the child's age but may include playing games or some automatic tests. Some examples include:

- **Transitory evoked otoacoustic emission (TEOAE):** These are sounds emitted in response to an acoustic stimulus of very short duration; usually clicks but can be tone-bursts.
- **PTA (Portable VROA or play audiometry):** Visually Reinforced Orientation Audiometry and Play audiometry.

5 Step Five: Treatment and management

If hearing problems or ear disease are found, the health professional will talk to parents, carers and/or teachers so they are aware of the issues as well as treatment and management options.

- The first step is usually antibiotic treatment and then a review by the health professional. Children are only referred to specialists if the problem is continuing over a long time or recurring. Hearing aids may be needed and speech pathologists may be able to help with language problems.
- This care and support will be arranged by the health professional. Like the initial ear health and hearing assessment, it is free* for Aboriginal and Torres Strait Islander children 0–6 years who have not yet started full-time school.
- A Hearing Australia audiologist will have regularly scheduled return visits to check on the child and their hearing.

Hearing Australia Audiologists provide support and up-skilling to primary health care professionals to enable them to undertake initial ear health checks for young children. The HAPEE program also provides support and training for non-health professionals or early childhood educators to use the PLUMS and HATS tools for initial screening.

If you are a primary health care professional or non-health professional and would like to find out more about how you can receive training or up-skilling reach out to the HAPEE team at:

 HAPEE@hearing.com.au

* The Hearing Assessment Program is an initiative of the Commonwealth Department of Health. Aboriginal and Torres Strait Islander children aged 0–6 or not yet attending full time school are eligible to be seen. All services provided under this program are free of charge. A hearing check includes a number of age appropriate tests of hearing and middle ear function.