

Newborn Hearing Screening – Information leaflet

Alder Hey Children's Hospital, Liverpool



Information for parents and guardians about what to expect from the Audiology appointment.

THE NEWBORN HEARING SCREENING PROGRAMME

ABOUT:

In the United Kingdom, around 1-2 babies in every thousand are born with a permanent hearing loss. This chance is increased to one in every hundred babies, for those babies who spent significant time in special care post birth. Because of this, a National Newborn hearing screen programme was introduced in the UK in 2001.

Initial Newborn hearing screen will be completed soon after birth or within the first 28 days. The New-born hearing screen is aimed to be completed within 4-5 weeks.

*This screening service is **not** provided by Alder Hey but by Liverpool Women's Hospital and Ormskirk Hospital.*

Initial attempt at screening:

Initial New-born hearing screen is completed using an Automated Otoacoustic emission (AOAE) in which a soft probe is placed in the baby's ear and the function of the inner ear organ (cochlear) is measured in response to stimulus.


It is extremely common for your baby not to pass this on the first attempt, and this would not indicate a permanent hearing loss.

Possible reasons for this include:


- 1) Your baby being too unsettled while the test is carried out
- 2) Too much ambient or background noise
- 3) Fluid or temporary blockage in the ear from birth.




REFERRAL TO ALDER HEY CHILDREN'S HOSPITAL:



If your baby does not pass their initial hearing screen in both ears, they will be referred to us at Alder Hey to be reviewed by an Audiologist. This will be an initial 30–45-minute appointment to repeat the hearing assessment in quiet conditions. This will usually be 2 weeks after the initial hearing assessment.



This initial assessment is most effective when your baby is settled or asleep. Because of this, it would be beneficial for your baby to be kept awake and fed directly prior to the appointment so they are settled for testing.



All results will be shared on the day of this appointment. If your baby was too unsettled for testing on the day, a new appointment will be booked to repeat this testing.



AUDITORY BRAINSTEM RESPONSE (ABR)

What and when?

If your baby does not present with clear responses on AOAEs, an Auditory Brainstem Response (ABR) appointment will be booked.

This is a non-invasive diagnostic test which aims to obtain hearing thresholds by directly measuring the brainstem's response to an auditory stimulus. As this measurement is very tiny, this assessment can only take place while your baby is asleep to reduce brain and muscle activity.

How to prepare you and your baby for the test:

- As your baby must be asleep for testing, please keep your baby awake and ready for a feed at the start of your appointment. Preparation will take place while your baby is awake which will include the placement of 3 electrodes on sticky pads to your baby's forehead and ears. This will not cause any pain or discomfort.
- The assessment normally takes between 30- 60 minutes. 2 hours will be set aside for this appointment to allow your baby to have a feed and get settled. Do not worry if your baby does not settle in this appointment as it often takes multiple appointments to complete testing.
- You may be asked to provide a sample of your baby's urine, as a precautionary measure, in case a permanent hearing loss is identified.
- Please bring additional milk for your baby in case they require feeding and a drink or a snack for yourself.



WHAT IF YOUR BABY IS DIAGNOSED WITH A HEARING LOSS?

If your baby is diagnosed with a permanent hearing loss, we are here to support you!

What will be the next steps:

We will likely look to fit a hearing aid as soon as possible if we believe there would be benefit. The early hearing aid fitting would give your baby the best chance of developing language, speech and communication skills. A hearing aid fitting appointment would be booked on the day of diagnosis if consent is given by parents.

Your baby would be referred to our Audiovestibular Physicians who are responsible for aetiological testing. The reason for this is to complete tests to uncover the cause of the hearing loss.

Further information regarding the Newborn hearing screening programme can be found on National Deaf Children's Society (NDCS) website:

<https://www.ndcs.org.uk/information-and-support/first-diagnosis/newborn-hearing-screening>



For more information contact us on:

Address: Alder Hey Children's Hospital East Prescott Rd., Liverpool L14 5AB

Phone: 01512525943 or 01512284811

Email: AudiologyMail@alderhey.nhs.uk

Website: www.alderhey.nhs.uk

Twitter: @AHAudiology

Link to our Audiology department leaflet:



https://alderhey.nhs.uk/application/files/8216/6195/1087/Childrens_Audiology_Department_PiAG_410.pdf

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

This information can be made available in other languages and formats if requested.

Alder Hey Children's NHS Foundation Trust

