The Paediatric Audiology Service:  
Baby ABR (auditory brainstem response)

What is a Baby ABR test?  
The auditory brainstem Response is a test used to estimate a baby’s hearing.

Why does my baby need an ABR?  
- Your baby was referred from the Newborn Hearing Screening Programme (NHSP)  
- Your baby has recently been unwell and a test is recommended  
- There are concerns that your baby is not responding to sounds as expected.

How does this ABR test differ from the NHSP test my baby has had already?  
Your baby was tested using a ‘screening test’ where only a ‘pass’ or ‘refer’ result is possible. A ‘refer’ result does **not** mean your baby has a hearing problem; it **does** mean further tests are needed.

How does the ABR measure my baby’s hearing?  
The test involves recording the electrical signals that travel along the hearing pathways from the ear towards the brain when a sound is heard.

When will I get the results?  
You will be given the results immediately after the test is completed. You will also have an opportunity to discuss the results and ask any questions you may have.

What happens during the appointment?  
1. Before the test begins, three sticky jelly pads will be placed on your baby’s head (on the forehead and behind each ear). These are attached to recording wires and record the electrical signals from the ear being tested. The jelly pads are designed especially for use with babies who have a softer and more sensitive skin than adults.
2. Testing is carried out while your baby sleeps naturally. As babies often sleep after being fed, giving your baby a feed at this time during the appointment may help.

3. The sounds will be presented to your baby’s ears through small earplugs or normal headphones. Each ear will be tested separately.

4. You may be asked to help by holding the headphone over your baby’s ear during the test or checking that the earplug remains in place while testing is being completed.

**Why must my baby be asleep?**

- The ear’s response to a sound is very tiny and easily hidden by the movement of nearby muscles. For this reason it is important that your baby is asleep during the test.

- Babies often wake when the jelly pads are being applied to the skin. A feed after this has been done usually helps them to fall asleep.

**Will the test cause my baby any pain or discomfort?**

- No

**How loud will the test sounds be?**

- The loudness of the sounds will vary from quiet to normal conversation levels. Sometimes slightly louder levels are also used.

**How long does the test take?**

- Testing usually takes about 30 - 60 minutes.

- Babies often take a while to settle and go to sleep so a **three-hour appointment** will be booked for you. You will be able to stay with your baby during the appointment.

- Please **do not** bring other children with you to this appointment.

**What should I do if I do not want to or can’t attend the appointment?**

- Please let us know **as soon as possible** if you will not be attending the appointment. This will enable us to offer the appointment to another family. These appointments are **not ‘double-booked’**, so a failure to turn up is a wasted three-hour appointment. Only two ABRs are booked each week.

- We understand that circumstance may result in you needing to cancel on the day. Please advise us as soon as you can so that we can arrange another appointment with you.
How can I change my appointment?

- Please contact us as soon as you know you need to change your appointment.

Please contact us if you have any further questions or concerns before you attend your appointment.

Note: A selection of individual test results are externally reviewed for quality control purposes. This is to make sure we are offering you the best possible service. Please speak to your audiologist if you have any questions about this process.

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.