

What Is A BAER?

A *brainstem auditory evoked potential* (BAER) is a test that records how fast a sound travels from the ear to the brainstem. It is very important to know that BAERs done in the EEG department do not test hearing. Hearing is tested in the Audiology department.

How Can I Help My Child Prepare for the Test?

If you have been told that your child is going to be sedated, do not let your child eat solid foods in the two hours before your appointment time. Clear fluids like water and apple juice are okay.

Plan to get to the hospital at least 20 minutes before your appointment time. It can be hard to find parking. Please come directly to the EEG Department in Room 1D43. If you did not receive a call from the hospital's Admitting Department to register you in advance, you will need to do this when you arrive at the hospital. After you arrive at the EEG department, we will decide when it is best for you to return to Admitting.

Will My Child Be Sedated for the Test?

In order to get the best results, it is important for your child to be very still and relaxed for this test. We can get the very best results when your child is asleep or very, very drowsy. For most young children (toddlers and infants) and some

older children, we recommend giving a mild sedative one hour before the time of testing.

Chloral Hydrate is one of the safest sedating medications available for infants and children. Our nurse will ask questions about your child's health to make sure that there are no potential problems with your child being sedated.



If sedation has been ordered for your child, you or a legal guardian must accompany your child to the test. If this is not possible please contact the EEG Department at 604-875-2124 to reschedule.

How Do I Sleep Deprive My Child?

You will be asked to "sleep deprive" your child. The sedation will be more effective if your child is tired when you arrive at the hospital.

Here is a table that tells you how to sleep deprive your child according to his/her age.

Infants	Awake 3 hours prior to appointment time
Children (less than 3 years)	To bed 1 hour later the night before and awake 1 hour earlier on the morning of the test
Children (older than 3 years)	To bed at midnight the night before and awake at 5:00 am the day of the test

It is very important that there is no sleeping after waking up.

What Will Happen at the Test?

The entire appointment will take from 1 to 1½ hours.

The technologist will ask you details about your child's medical history. You will be asked about your child's:

- birth history
- development (walking, talking)
- schooling
- family medical history
- names and dosages of any prescription or non-prescription medication(s).

If you cannot come to the appointment with your child, please make sure that this information is available to the technologist.

If you require the services of an interpreter please make sure that you notify the EEG department at least two days prior to your appointment.

Four electrodes will be attached to your child's head (two on the top of the head and one on either earlobe). The technologist will measure your child's head and mark the scalp with a red crayon, and then she will rub each spot with a Q-tip dipped in a special cleaning gel. She will apply the electrodes using a special paste. It takes about 5 minutes to apply the electrodes. Then small foam earpieces (just like the ones that come with a walkman) are placed in each ear.



Your child will lie on a bed during the test. You may cuddle your child if it will help him/her to relax and settle better. The technologist will ask your child to close his/her eyes and relax. The technologist will wait until your child is relaxed and settled before starting the test.

Each ear is tested separately. Your child will hear a clicking sound from the foam earpiece in the ear being tested and a "whooshing" sound from the earpiece in the other ear.

What Happens After the Test?

The technologist removes all of the wires. The paste and crayon marks are washed out of the hair with warm water.

If your child was sedated, the sedation nurse will make sure that there are no adverse reactions to the medication and will give you instructions on what to expect for the rest of the day.

When Will I Know the Results of the Test?

Your child's neurologist will have the results about two weeks after the test. You will need to phone his/her office for an appointment (if you do not already have one) to discuss the results.

The technologist **cannot** give you the results of the test.

**Contact the EEG Department:
Area 1B10
604-875-2124.**

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Brainstem Auditory Evoked Potential (BAER)



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