

## What is an EEG?

An EEG (electroencephalogram) is a test that records the electrical signals of the brain.

## How Can I Help My Child Prepare for the Test?

Unless your doctor has told you otherwise, continue to give your child his/her medication as usual.

Make sure your child's hair is washed and dried the day before your appointment.

Make sure that your child is not hungry during the test. Have something to eat before arriving at the hospital. Do not let your child have any caffeinated drinks (i.e. colas or hot chocolate, etc...). If your child is an infant, bring a bottle with you. If you are breast feeding, that can be done while we are recording the EEG.

Some changes in brain activity only appear in sleep, so it is important that your child has a nap during the test. You will be asked to "sleep deprive" your child

## How Do I Sleep Deprive My Child?

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.*

If your child is having an EEG and a VEP (visually evoked potentials) test, do not follow the sleep deprivation instructions.

## What Will Happen at the Test?

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 1B10.

The entire appointment will take about 1 ½ hours.

The technologist will ask you details about the reason for the EEG. 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 2 days prior to your appointment.

- There are 26 electrodes that will be attached to your child's head.

- The technologist will measure and mark the scalp with a red crayon.



- All the marks are rubbed with a Q-tip dipped in a special cleaning gel.
- Most of the electrodes are applied using a special "hair glue" that is dried with a small hair dryer. This is painless but smelly.
- In some instances we do not use the glue – instead the electrodes are applied with a special paste that has no odor and does not need to be dried with the hairdryer. This method can only be used with older children who are able to lie very still. The technologist will decide which method will give the best test results for your child. Some of the electrodes are applied on the face and chest with special paper tape.

The actual EEG recording lasts from 25 to 35 minutes.

Your child will be lying on a bed during the test.

If your child is old enough, he/she will be asked to open and close his/her eyes, watch a special strobe light, and do some deep breathing.

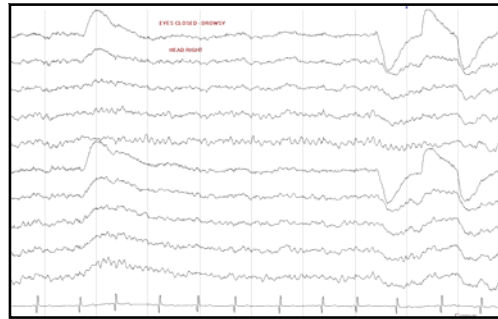
After this, your child will have time to lie quietly with eyes closed – this is when we are waiting for sleep.

It is important that your child lie still and quiet during the testing – sometimes this is easier if you are not in the room and the technologist might ask if you are willing to sit outside during the test.

### What Happens After the Test?

If glue was used, the wires are taken off with a special remover that dissolves the “hair glue”. This is smelly and often leaves a sticky residue in the hair which will come out with regular shampoo when you get home. The technologist will also make sure that all of the crayon marks are washed off.

If the paste was used, the wires, paste and crayon marks are washed off with warm water. The paste will leave a residue in your child’s hair (almost like hair gel) that will come out with regular shampoo when you get home.



### When Will I Know the Results of the Test?

Your child’s doctor will have the results in about 1 ½ to 2 week’s time after the test. If you have an appointment with the Neurology Clinic, the neurologist will have the results available at the time of your appointment.

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

For more information see our slide show at [www.cw.bc.ca/eeg](http://www.cw.bc.ca/eeg). If you have any questions you can contact us at 604-875-2124.

**EEG Department  
Area 1B10  
4480 Oak Street,  
Vancouver, BC V6H 3V4**

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# EEG

## Electroencephalogram



An agency of the Provincial  
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**4480 Oak Street, Vancouver BC, V6H 3V4  
604-875-2345  
[www.bcchildrens.ca](http://www.bcchildrens.ca)**