

# What is an EEG?

## Electroencephalogram



### EEG Department

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[www.bcchildrens.ca](http://www.bcchildrens.ca)



### What is an EEG?

A test that records the electrical signals of the brain is called an electroencephalogram. It is such a big word that most people call it an EEG.

To see a photo book of a child having an EEG, please go to the BC Children's Hospital website [www.bcchildrens.ca](http://www.bcchildrens.ca), search for **EEG** and then click on **EEG Photo Book**.

### Are there things I need to do to get ready for my child's EEG?

**Yes.**

The day before the test:

1. Make sure your child's hair is washed and dried before your appointment. Give your child his or her medication as usual unless your doctor has instructed you otherwise.
2. Make sure your child is very sleepy by sleep depriving her or him. Some changes in brain activity only appear in sleep, so it is important that your child has a short nap during the test.

### How do I do sleep deprive my child?

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

Infants (under one year of age)	Keep awake for 3 hours before the appointment time
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Children who are less than 3 years	Go to bed 2 hours later the night before and be awake 2 hours earlier on the morning of the test
Children who are older than 3 years	Go to bed at midnight the night before and be awake at 5:00 the morning of the test

**When you wake your child following these instructions, keep her or him awake. Do not let your child fall asleep in the car**

### Tips that help keep your child awake:

- Have a second person sit in the back with your child to keep him or her awake if possible.
- If your appointment is for later in the day, arrive early so that there is time for your child to be alert and active for a couple of hours before the test.

### The day of the test:

1. Feed your child before you come to the hospital so he or she is not hungry during the test. If your child is breast feeding, that can be done while we are recording the EEG.
2. Do not let your child have any drinks that have caffeine in them such as colas, hot chocolate, or coffee.
3. Please bring anything with you that will help your child fall asleep such as a bottle, soother, blanket or other comfort item.
4. Bring your child's history of her or his:
  - birth
  - development such as when she or he walked, and talked
  - schooling
  - family medical history
  - as well as the names and dosages of any medications your child takes

5. Plan to get to the hospital on time. Being late for your appointment cuts into your child's testing time and does not allow us to get a complete recording. This may result in your child's EEG needing to be repeated. If you arrive late, your appointment may be cancelled and rescheduled to a different date.

### **Parking:**

Arrive at the hospital 20 minutes before your appointment to give yourself time to park and get to the EEG Department. You can also use the valet parking located at the main entrance of the hospital. There is no extra charge for this service, but you will still pay the regular parking fees.

### **Where do we go when we come in the hospital?**

Please come directly to the EEG Department in Room 1B10. There is an information desk in the lobby if you need help finding the room.

If the hospital's Admitting Department did not call to register your child before your appointment day you might need to do this when you arrive at the hospital. After you arrive at the EEG Department, we will let you know if you need to return to Admitting.

### **What happens during the test?**

The entire appointment will take about 1 ½ hours.

1. The technologist asks you the reason for the EEG. She will also ask questions about your child's medical history. You will be asked about his or her: birth history, development such as walking and talking, schooling, family medical history, and the names and dosages of any medications.
2. The technologist puts 27 small electrodes on your child's head. This takes about 15 to 20 minutes. To do this the technologist:
  - a. First measures your child's head with a paper tape measure and marks her or his scalp with a colored crayon. The marks show where the electrodes will be placed.



The electrodes measure the electrical signals coming from your child's brain. This does not hurt.

- b. Next, each mark is rubbed with a Q-tip dipped in a special cleaning gel.
  - c. The electrodes are then put on with a special paste.
3. Your child will be lying on a bed during the test. The actual EEG recording lasts from 25 to 35 minutes. During this time, your child will also be recorded on video. This helps the doctor who reads the EEG.

If your child is old enough to follow instructions, he or she will be asked to open and close his or 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.

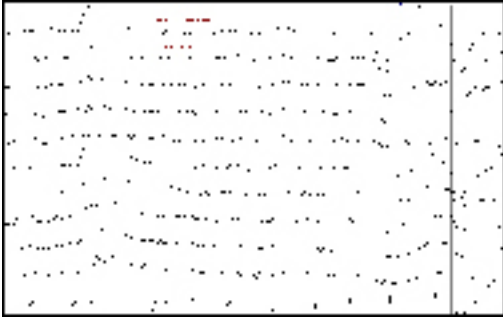
It is important that your child lie still and quiet during the testing. Sometimes this is easier if you are not in the room and the technologist might ask if you are willing to sit outside during the test.

### **What Happens After the Test?**

The technologist removes the electrodes. The paste and crayon marks are washed off with warm water. There may be remains of paste in your child's hair. It looks and feels almost like hair gel. You can wash this 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 ½-2 weeks 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.



## Remember:

1. Make sure your child stays awake after you followed the instructions to sleep deprive her or him.
2. Feed your child before you come to the hospital.
3. Bring your child's medical, developmental and school history with you.
4. Bring a list of the medications and dosages your child takes.
5. Make sure your child has clean, dry hair.
6. Be on time for your appointment. Get to the hospital 20 minutes before your appointment time.
7. Come directly to the EEG Department in Room 1B10.
8. If you need an interpreter please call us at least 2 days before your appointment.

## Have questions?



Call 604-875-2124

Call for free in BC

1-888-300-3088 ext 2124.

**It's good to ask!**