



# Outpatient EEG Tests



An EEG is a painless test of your child's brain function and electrical activity.

## What is an EEG?

An EEG (electroencephalogram) is a painless recording of the brain's electrical activity. Small metal cups, called electrodes, will be used to test your child's brain function.

Watch a video about getting an EEG:

[seattlechildrens.org/EEG](http://seattlechildrens.org/EEG)

## How are the electrodes put on my child?

The person who will do the test is called an "EEG technologist," or "EEG tech." The EEG tech measures and marks 30 spots on your child's head with a red crayon. These marks are where the 30 electrodes will be attached with glue or paste. This is done through your child's hair. Your child's hair **does not** need to be cut or shaved. The parts of your child's head where the electrodes will go need to be very clean to get the best recording possible. The EEG tech will rub a sandy cleanser on the places where the electrodes will attach before putting them on.

It takes up to 20 minutes to put all the electrodes on. Your child's head and body need to be completely still for the electrode application.

You may be asked to hold your child's cheeks to keep their head still. If your child is 4 or younger and still moves too much, their arms may be wrapped snugly so that the electrode application can go as quickly and easily as possible. If your child is 5 or older, your child **cannot** be held still by anyone (parent or staff), so they must be able to stay still on their own if they are going to be awake during the electrode placement. If they are not able to be still, your doctor may order sedation for the electrode placement. If your doctor has ordered this, the same process will happen while your child is asleep.

We know that children react differently to getting an EEG. We will attempt to meet your child's needs.

### What happens during an outpatient EEG?

After the electrodes are in place, the EEG tech will start the recording and test your child's brain waves in a few different ways. These are the tests we may ask your child to do:

- Deep breathing for up to 5 minutes
- Checking response to flashing lights
- Counting and remembering things
- Opening and closing eyes
- Lying quietly and/or sleeping

At the end of the recording, the EEG tech will take the electrodes off your child's head with water or solvent. This will not hurt your child.

### How do I get my child ready for the test?

Before the appointment, please:

- Have your child sleep-deprived and allow no naps before the test. Please see the section called "Instructions for keeping your child awake." This is not necessary if your child is autistic, developmentally delayed or will be sedated during the electrode placement.
- Have your child's hair clean and dry. Please avoid styling products, oils, and braids.
- Give medicines as scheduled, unless your child's healthcare team gives you different directions.
- Let your child eat and drink before the test, but avoid caffeine and sugar.
- Take your child to the bathroom before the appointment time.
- Bring things that make your child feel comfortable, like a bottle, pacifier, blanket or toy.
- If appropriate, talk with your child about what to expect. Visit [www.seattlechildrens.org/eeg](http://www.seattlechildrens.org/eeg). The page has links to videos and other materials, including the children's book "What to Expect During Your Outpatient EEG." The book shows what it's like to have an outpatient EEG at Children's.
- Only **one** parent or caregiver is allowed in the EEG lab with your child. If you have other children, please arrange childcare ahead of time.
- Please call to reschedule if you or your child have flu-like symptoms.
- Please be on time. If you are more than 20 minutes late, we may have to reschedule.

**To Learn More**

- Neurodiagnostic Services  
206-987-2081
- Ask your child's healthcare provider
- [www.seattlechildrens.org/EEG](http://www.seattlechildrens.org/EEG)

**When will I know the results of the EEG?**

The EEG tech that performs the test cannot give you any information about the results of your child's test.

The EEG is read by one of our pediatric neurologists, and the results are shared with the doctor who ordered the test. Please call your doctor 5 business days after the EEG test for results.

**Instructions for keeping your child awake**

It is very important that your child be deprived of sleep before the test. This is because we want your child to fall asleep during the test, so that we can see your child's brain function during sleep. Children who are autistic or developmentally delayed, however, should not be sleep-deprived.

**Free Interpreter Services**

- In the hospital, ask your child's nurse.
- From outside the hospital, call the toll-free Family Interpreting Line 1-866-583-1527. Tell the interpreter the name or extension you need.

**Age of child**

**Amount of sleep deprivation**

Age of child	Amount of sleep deprivation
Less than 6 months	Normal sleep but no nap prior to test
6 months to 1½ years	2 hours less sleep and no nap prior to test
1½ to 2½ years	3 hours less sleep and no nap prior to test
2½ to 3½ years	3½ hours less sleep and no nap prior to test
3½ to 6 years	4 hours less sleep the night before
6 years and over	5 hours less sleep the night before

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Seattle Children's offers interpreter services for Deaf, hard of hearing or non-English speaking patients, family members and legal representatives free of charge. Seattle Children's will make this information available in alternate formats upon request. Call the Family Resource Center at 206-987-2201.

This handout has been reviewed by clinical staff at Seattle Children's. However, your child's needs are unique. Before you act or rely upon this information, please talk with your child's healthcare provider.

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