

# ELECTROENCEPHALOGRAM (EEG)



## What is an electroencephalogram (EEG)?

An EEG is a safe, painless test used to monitor and record electrical activity in the brain. Every child's brain produces electrical signals that can be measured. The electrical signals form a pattern that can be interpreted by a doctor with special training. Abnormal brain wave patterns on EEG can be a sign that a child is at a risk for seizures, or other neurological problems. Most commonly, EEG is used to diagnose and treat seizures. EEG may also be used to monitor brain activity in children with sleep problems.

## What happens during the test?

An EEG is performed either in the Neurology Clinic or in the hospital. A trained EEG technician will attach small metal discs to your child's scalp using a paste. These disks are attached to wires, which send signals to a computer, which records the results. You child will be asked to lie quietly in a bed during the test. The EEG technician may ask your child to breathe a certain way, or look at a blinking light. Most EEGs last under 1 hour, although in some cases, more prolonged monitoring is recommended. Often, the technician will try to capture brain waves while your child is both awake and asleep. After the recording is completed, the EEG technician will remove the disks and wires (also called electrodes) and the test will be complete. Some children experience mild discomfort or anxiety with the placement or removal of the electrodes, but in general, EEG is a safe, non-invasive, and painless test.

## How will I find out results of the test?

After the EEG is performed, the computer data will be sent to a specially trained doctor (usually a neurologist or epileptologist) for interpretation. The EEG technician is unable to give you results of the test. The doctor will "read" the EEG, or interpret the brain wave patterns, and create a report of their findings. Then, your neurology provider will discuss the results with you during an office visit, hospital consultation, or phone call, depending on the circumstances. In some cases, results will be available quickly. Other times, it may take a few days for a doctor to read the EEG and create a report. If you have any questions regarding the results of an EEG test, please do not hesitate to contact our office.

## How do the results of the EEG affect my child?

The results of EEG testing affect each child differently, depending on their medical condition and the reason the test was ordered. Your neurology provider will discuss how the results of EEG testing will affect your child's medical care.



# CNCA EEG LAB

**Child's Name:** \_\_\_\_\_

**Date of EEG:** \_\_\_\_\_ **Time of EEG:** \_\_\_\_\_

\*\*\*If running late, please call our appointment line at 512-494-4000. It may be necessary to reschedule for a later time or date.

## General Instructions:

- The child must have CLEAN DRY HAIR. Please no styling products, grease/oils, or leave-in conditioners.
- Bring a list of medications taken in the last 48 hours.
- Do not discontinue any medications unless directed by your neurology provider.
- No caffeine or sugar before the test.
- Please bring anything that might help your child relax or feel comfortable (such as a book, blanket, or stuffed animal).
- Please have cell phones on silent before entering the EEG lab.
- Please bring something to keep your child entertained, as they must lay down and stay still for 1-2 hours during the test.

## \_\_\_ Sleep Deprivation Instructions (in addition to general instructions):

- Ages 3 and younger: No nap on the day of testing. They may nurse or have a bottle during the test.
- Ages 4 and older: No more than 4 to 6 hours of sleep prior to the test.
- Achieving sleep is very important for this test. We ask that only one family member at a time be in the sleep lab with the patient.

## \_\_\_ 24 Hour or Ambulatory EEGs (in addition to general instructions):

- Wear a button-down shirt, or you will not be able to change clothes after you are hooked up to the EEG computer.
- Remember to have CLEAN DRY HAIR. Please no styling products.
- If the EEG will be monitored at home, you will come back the next day to be disconnected.

## Resources:

[http://www.dellchildrens.net/services\\_and\\_programs/comprehensive\\_epilepsy\\_program/](http://www.dellchildrens.net/services_and_programs/comprehensive_epilepsy_program/)

<http://kidshealth.org/parent/general/sick/eeg.html#>

