



Name of Child: \_\_\_\_\_ Date: \_\_\_\_\_

# EEG or Electroencephalogram

## What is an EEG?

Nerves in the brain communicate with one another by sending tiny electrical messages. An EEG or electroencephalogram measures the electrical impulses in the brain. It does this right through the skin. The machine records what it finds on a piece of paper or a computer. This test does not hurt. There are no needles or shots.

## Why do an EEG?

If the brain's electrical impulses get out of control, a seizure can occur. An EEG can help a doctor decide whether a child has seizures, brain injury or other problems. This test can also be used to see if a medicine or treatment is working. An EEG cannot tell what a person is thinking. It does not measure how smart a person is.

## Getting ready:

- Someone from the EEG Department will try to call you before the test, to tell you how to get your child ready. If they do not call you by the day before the test, call them at 602-546-1640.
- The night before the test, wash your child's hair. After washing, do not use hair spray or gel.
- Give your child his or her regular medicines, unless your doctor tells you not to.

- Your child will need to sleep during part of the test. This will be easiest if your child is very tired. The night before the test, your child should get less sleep than normal. Someone from the EEG Department will tell you what to do.

- Feed your child as usual. The day before the test, do not let your child eat chocolate or drink cola, Mountain Dew, coffee, tea or anything else with caffeine.

- If your child is old enough to understand, explain what will happen. Do this when you think the time is right. Children do best when they are told what they will see, feel and hear during the test.



**Your child may bring that special stuffed animal, doll, pacifier, tape, or blanket to the test.**

- Some children rest better with a special toy. Your child may bring that special stuffed animal, doll or blanket to the test. If your child falls asleep with a bottle or pacifier, bring that, too.

## The test:

- The EEG technician will ask you for your child's medical history, and what medicines your child is taking.

- The whole test takes one and a half hours.

- You may stay with your child during the test. However, some children will do better when the parent is not in the testing room.

- The EEG technician will put electrodes on your child's head. These look like buttons with wires on them.

- The EEG technician will clean the spots on your child's head where the electrodes will go. This cleaning may feel rough and gritty, like sand.

- If your child is young or having trouble staying still, the technician will glue the electrodes in place. A noisy air dryer will be used to dry the glue. If your child is older, each electrode will be held on with tape.
- The other ends of the wires go to the EEG machine. The machine records what it finds on a piece of paper or a computer.
- At the beginning of the test the technician may ask your child to relax, and take deep breaths for 3 or 4 minutes.
- Your child will need to fall asleep for part of the test.
- Near the end of the test, your child will look at a bright flashing light. Many children like this part.

## **After the test:**

- The EEG technician will take the electrodes and glue off your child's head. When you get home, wash your child's hair.
- Your child may eat, play and sleep as usual.
- A special doctor called a pediatric neurologist will look at the EEG results, and tell you or your child's doctor what he or she found.

## **Follow-up:**

- You may call your doctor's office in two or three days for the results.

## **Now that you've read this:**

- Tell your nurse or doctor how you will get your child ready for the test.  
(Check when done.)



If you have any questions or concerns,  
 call your child's doctor or  call \_\_\_\_\_

If you want to know more about child health and illness,  
visit our library at The Emily Center at Phoenix Children's Hospital  
1919 East Thomas Road  
Phoenix, AZ 85016  
602-546-1400  
888-908-5437  
[www.phoenixchildrens.com](http://www.phoenixchildrens.com)

**Disclaimer**

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#297 • Written by Nancy Quay, MS, RN • Illustrated by Dennis Swain  
This handout is also available in Spanish as #366/297s.