

What is an ambulatory EEG?

An **ambulatory EEG** (electroencephalogram) is a painless test that measures and records electrical activity in the brain for up to 24 hours while your child is at home or school. This test helps your medical team determine if your child is having abnormal brain activity at different times during the day or night.

EEG electrodes are placed on your child during a scheduled clinic visit. After they are placed, you and your child will go home, where the EEG recording will take place. You will return to Mott at the end of the study for EEG electrode removal. Completing the testing at home allows your child to go about their normal routine while the EEG is being recorded.

How do I schedule the test?

Our EEG scheduler will call you to schedule the test. Ambulatory EEGs are scheduled Monday through Friday.

How do I prepare my child for the test?

Arriving at the hospital:

- Plan extra time for arrival at the hospital. Allow time for parking and badging.
- Check in at the Mott EEG desk on Floor 12. We will have you wait in the waiting room until the EEG technologist is ready to take your child to the lab.
- Please arrive on time. If you are more than 30 minutes late, we may have to reschedule the appointment.

Before the appointment:

- Wash your child's hair the night before or the morning of the test. Do not use any styling products (they prevent the electrodes from sticking).
- Give your child their normal medicines as scheduled unless your child's provider gives you different instructions.
- Dress your child in clothing that buttons or zips down the front. This helps keep the EEG electrodes from being pulled off.
- Let your child eat and drink before the test but please avoid caffeine and sugar.
- Take your child to the bathroom before the appointment.
- Bring things that make your child feel comfortable, like a bottle, pacifier, blanket, or toy.
- Plan to be with your child (or arrange for an adult to be with them) while the EEG is recording. This is important because you will be asked to record all seizure episodes in the event log (explained below).

What happens during the setup for an ambulatory EEG?

- A specially trained EEG technologist will place the electrodes and set up the required EEG equipment. This will take about 60 minutes from start to finish. Your child's hair does **not** need to be cut or shaved.
- Your child will be asked to lie down on a stretcher or bed.
- Your child's head and body need to be completely still when the electrodes are placed. You may be asked to help your child stay still so the process can go as quickly and easily as possible. If your child is 4 years or younger and still moves too much, their body may be wrapped snugly so that the electrode application can be completed.
- Your child's head will be measured with a measuring tape.
- The EEG technologist will mark 30 locations on your child's head with a grease pen.

- The EEG technologist will rub a sandy cleanser on the places where the electrodes will attach before putting them on, which helps them stay in place.
- Small circular-shaped electrodes will be placed on your child's scalp.
- Your child's head will be wrapped in gauze.
- The electrodes are connected to a small EEG machine that is carried in a small backpack.
- The EEG staff will explain the EEG push button, video camera equipment, and your important role in keeping a record of your child's seizure episodes.
- You will be given an event log to write down the time and details of events when they occur. This information will help the doctor read and interpret the computer data to make an accurate report.

What activities should avoid when we are at home?

Please do not:

- Allow any of the equipment to get wet, bent, pulled, or unplugged
- Allow your child to shower, take a bath, or swim
- Allow your child to scratch their head (please try to limit or prevent scratching as much as possible)
- Allow your child to chew gum
- Allow your child to be involved in activities that would cause them to sweat a lot

How do we use the event log when we are at home?

- Stay with your child and complete the log when they have an episode(s). Be sure to write the date, time, and a description of the event.
- Push the event marker if they have an event.
- Write additional times in the event log such as when your child is sleeping, waking up, eating, etc.

What if an electrode falls off during the test?

An electrode falling off is not an emergency. If an electrode falls off, be sure to note it in the event log and let the EEG technologist know about it when your child returns to have the electrodes removed.

What happens when the test is over?

- When the test is over, you will return to the Mott EEG lab on Floor 12 to have the electrodes removed from your child's head.
- The electrodes are removed with an adhesive removing oil.
- Bring the event log and give it to the EEG technologist.
- Your child will need a bath or shower at home to clean their hair.

When will we get the test results?

It can take 7-10 business days get the results. The amount of time it takes depends on the length of the test. When the results are back, a pediatric neurology nurse or your child's neurology provider will contact you through the patient portal or by phone.

Who do I contact with questions?

If you have questions prior to your child's EEG, please call the EEG laboratory at (734) 232-9271, option #2, Monday through Friday, 8:00 AM - 5:00 PM.

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