

Ambulatory EEG Monitoring

What is an Ambulatory EEG?

An ambulatory EEG is a test that measures and records electrical activity in the brain for up to 24 hours while your child is at home or school. An ambulatory EEG helps your medical team determine if your child is having abnormal activity in the brain at different times during the day or night. EEG leads are placed on your child here at Mott, then you go home for the EEG recording. You will return at the end of the study for EEG lead removal. It allows your child to go about their normal routine while the EEG is being recorded.

- You will receive a call from the scheduler to schedule the test. Ambulatory EEGs are scheduled Monday-Friday.

How do I prepare for the test?

- Plan extra time for arrival at the hospital. Allow time for parking and badging.
- You will check in at the 12th floor EEG desk and will be asked to wait in the waiting room until the EEG technologist takes your child to the lab.
- Please be on time. If you are more than 30 minutes late, we may have to reschedule.
- 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).

Before the appointment:

- Give 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 to prevent 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 make arrangements for an adult to be with them at all times while the EEG is on. This is important because you will be asked to record all episodes on the event log.

What happens during the set up for an Ambulatory EEG?

- A specially trained EEG technologist will apply the electrodes and the EEG equipment that is required. 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 old 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 be placed 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 computer machine that is carried in a small backpack.
- The EEG technologist 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 do I need to do when we are at home?

- Do not allow any of the equipment to get wet, bent, pulled or unplugged.
- Do not allow your child to shower, take a bath or swim.
- As much as possible, try to limit or prevent your child from scratching their head.
- Do not allow your child to chew gum or be involved in activities that would cause them to sweat a lot.

Record your child's episode on the event log:

- Stay with your child and complete the event log when your child has an episode. 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 on the event log such as when your child is sleeping, waking up, eating, etc.

What if an electrode falls off during the study?

An electrode falling off is not an emergency. If an electrode falls off, be sure to note it on the event log and let the EEG technologist know 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 12th floor EEG lab to have the electrodes removed from your child's head.
- The electrodes are removed with an adhesive removing oil.
- Bring the event log to give to the EEG technologist.
- Your child will need a bath or shower at home to clean their hair.

When do we get the 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 you will be contacted by a Pediatric Neurology nurse or your child's neurology provider via the Patient Portal or by phone.

If you have further questions prior to your child's EEG, please call the EEG laboratory at 734-232-9271 option #2, Monday through Friday, 8am-5pm.