

# What to Expect During an Adult EEG: A Guide



## What is EEG Testing?

- An electroencephalogram, or EEG, is used to study brain wave patterns.
- Small disposable discs (electrodes) are attached to the scalp to record the electrical signals produced by the brain. These electrodes send this information to a machine that records brain activity.
- EEGs can help diagnose and monitor a number of conditions affecting the brain, but they are most often used to detect epilepsy.





## **EEG** Preparation

- Wash your hair the evening before your test Do not use any styling products in your hair.
- You may eat, drink and take prescribed medications as usual before the test.
- If you are experiencing excessive coughing, sneezing or running a fever higher than 100, please reschedule your appointment.
- Check in at the registration office on the first floor of the Primary Care Center at least 15 minutes prior your appointment.
- Please proceed to the EEG lab, located on the ground floor of the Primary Care Center, to check in.
- Please use the bathroom prior to your technologist bringing you back to the testing area.
- Silence your cell phone during testing.



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## Types of EEG Tests

- Routine EEG: These tests are recorded for 40 minutes after placement of the electrodes.
- Sleep-deprived EEG: If your provider requests a sleep deprived study, you will stay up late and allow no more than 4 hours sleep, then come to the EEG lab in the morning for your test. Do not use caffeine or stimulants to stay awake.
- Ambulatory EEG: You will take the equipment home for one to three days after the electrodes are attached (based on your provider's instruction). This equipment does not include video.
- EMU admission- If your provider needs to monitor your seizures and record video imaging during a seizure, you will be admitted to our Epilepsy Monitoring Unit (EMU) for up to a week or longer.



#### What Happens During the EEG?

- EEGs are performed while you are lying down on a stretcher. A neck roll will be placed underneath your neck.
- An EEG technologist will measure and mark your head with a red crayon to determine the exact placement of the electrodes.
- The technologist will then use a cotton swab and a sandy scrub to gently exfoliate your skin so the electrode will be able to make good contact with your scalp. This helps improve the accuracy of the EEG.
- 27 electrode discs are filled with a salt-based cream and placed on your scalp, with two cardiac leads placed on your chest.
- If you are getting an ambulatory study, the electrodes are attached with a special glue. This will ensure they stay on overnight.
- Routine EEGs typically take 40 minutes after all the electrodes have been placed.
- You will need to keep your eyes closed for the majority of the EEG. The technologist will give you instructions to open your eyes occasionally throughout the procedure.







### **Activation Procedures**

- Two or three activation procedures will be performed during the study, which may include the following:
- Photic Stimulation: A strobe light will flash at 10-second intervals while your eyes are closed. You be will instructed to open your eyes as the frequency of the flashing light decreases.

 Hyperventilation: You will be instructed to perform a deep breathing exercise for 3-4 minutes (as long as there is not a medical reason not to perform them).

Sleep: Ideally, drowsiness or sleep will be recorded.





## Removing the Electrodes

- At the conclusion of the study, the EEG technologist will remove the electrodes.
- The technologist will use warm water and a washcloth to clean any visible residue from your scalp.
- If you underwent an ambulatory study, a special remover will be used to remove the electrodes from your scalp.
- After the removal, your hair will be damp, so you may want to bring a scarf or hat to wear afterward.
- Occasionally, patients may experience redness or skin irritation after the electrodes are removed.
- The EEG technologist is unable to provide results. Please contact the doctor or office that ordered the test to discuss results.

If you have any questions please call 434-924-2706.



## Helpful Links

- Adult Neurology and Epilepsy Clinic-<u>Epilepsy Department of Neurology (virginia.edu)</u>
- EEG Lab contact information-<u>UVA EEG and Evoked Potential Lab in Charlottesville, VA (uvahealth.com)</u>
- Medical Records Release of Information-<u>030105</u> <u>Authorization for UVA Health Information Release of Medical Information.pdf (virginia.edu)</u>
- Free shuttle at UVA Health-Free Shuttle at UVA Health Med. Ctr.: Routes & Schedules | UVA Health
- Maps/directions-<u>Visiting UVA Health Medical Center | UVA Health</u>



## Parking

- Please park in the Lee Street Parking Garage, located at 121 11<sup>th</sup>Street, SW, Charlottesville, VA.
- If you need valet parking, pull in the front entrance circle of the Main Hospital, located at 1215 Lee Street, Charlottesville, VA.





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