

## Information for patients undergoing an electroencephalogram (EEG)

### What is an electroencephalogram (EEG) examination?

EEG is the abbreviation of electroencephalogram. An electroencephalogram or EEG is the recording of electrical activity produced by the brain.

### Preparing for the test

Eat as normal and continue to take any tablets as usual and bring a list of your current tablets with you to the appointment.

Arrive with clean, dry hair free from grease, hair spray and lacquers etc.

### How is the test done?

The test takes approximately 1 hour. You may wish to bring a friend or family member. A physiologist starts by making measurements of your head. He/she will draw marks on your head using a special pencil to guide them. After gently rubbing over the marks with a gritty paste, the physiologist attaches 25 small metal discs to your head using a sticky paste and/or tape. This takes around 20 minutes. The recording itself takes about 30 minutes. You will be lying or sitting during this time and the physiologist will ask you to follow instructions, such as open or close your eyes.

### What other tests are used?

Some of the following may be performed during your test:

**Deep breathing:** This may produce changes in your brain that could help in diagnosis. You will be asked to take deep breaths for about three minutes. This often causes a light-headed feeling and/or tingling of the lips or fingers – this is normal and will pass when you return to breathing normally. This may very rarely cause a seizure in people that are very sensitive but the physiologist will be looking at the EEG through the procedure. You will be looked after if you have a seizure.

**Photic stimulation:** This test looks at how your brain reacts to bright flashing lights. This is an important part of the test for people who may have seizures or blackouts caused by flashing lights. You will be asked to look at a bright flashing light with your eyes open or closed. This may very rarely cause a seizure in people that are prone to epilepsy, but the physiologist will be looking at the EEG during the test and will stop flashing the lights if this happens.

**Sleep test:** A recording during sleep or after a lack of sleep (sleep deprivation) can sometimes be helpful. You will be told in advance if you are to have this type of recording. Lack of sleep can sometimes cause attacks in people prone to epilepsy. If you have an EEG recording after deprivation of sleep, you may still be sleepy when you have finished the test. Do not drive or

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operate machinery for the remainder of the day and to have someone with you to take you home. If you hold a driving licence, do not drive on the day of your sleep test.

**Video:** It may be helpful for the team to make a video recording of you during the test in the event you have a seizure or one of your episodes. This will be explained to you if it is necessary

### **Will having a seizure during an EEG test affect my right to drive?**

If you have a seizure you may have to stop driving. If you are concerned about the risk of having a seizure, it is advisable to talk to the doctor who has asked you to have the test.

### **What happens after the test?**

After the test, the discs are removed and you will be able to return home or to work/ school. Small pieces of sticky paste may be left in your hair – these will wash out with shampoo. There is a small chance that you may experience some reddening of the skin or soreness where the paste is applied. You will not get the results of the test on the same day. The EEG will be looked at by the clinical physiologist and reported by the Consultant Clinical Neurophysiologist. Results will be sent back to the referring Consultant.

### **What are the risks of not having the test?**

EEG is a diagnostic test and there is no alternative. If you would prefer not to have the test done you would need to discuss this with your doctor.

### **Further information**

Please feel free to contact the Clinical Neurophysiology Department if there is any information you do not understand. If your appointment is not convenient please phone the department as soon as possible to rearrange this.

### **Department address and contact information:**

Clinical Neurophysiology  
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If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email [interpreting.service@uhb.nhs.uk](mailto:interpreting.service@uhb.nhs.uk).