

## Information for patients undergoing a sleep deprived electroencephalogram (EEG) examination

### What is a sleep deprived EEG?

A sleep deprived electroencephalogram EEG involves staying awake for a full night, and then coming to an appointment at the Neurophysiology Department in the morning. During the appointment your EEG will be recorded for around 1 hour while you are drowsy and/or asleep.

### Preparing for the test

It will be necessary to stay awake all night before the test, preferably without the help of beverages containing caffeine. It is hoped that by doing this you will fall asleep in our department while the EEG is being recorded.

When you are sleep deprived some types of seizures are more likely to occur. Please ensure that you are accompanied by a responsible adult. We advise that you do not use any dangerous machinery for the remainder of the day in case you are still feeling drowsy after the test. It is also advisable that someone stays with you for the rest of the day after the test, until you have a chance to sleep properly. If you hold a driving licence it is advisable not to drive on the day of your sleep test.

### How is the test done?

The test takes approximately one hour. 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 30–40 minutes. You will be lying during this time and the physiologist will ask you to follow instructions, such as opening or closing your eyes.

### What other procedures are used?

Some of the following may be needed during your test:

**Deep breathing:** This may produce changes in your brain wave activity that could help in diagnosis. You will be asked to take deep breaths for about 3 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.

**Photic stimulation:** 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 have a predisposition to epilepsy, but the physiologist will be looking at the EEG during the test and will stop flashing the lights if this occurs.

## Information for Patients

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**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 hold a driving licence, having a seizure could mean that you 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. 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 analysed 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.

Please make sure you read and understand this leaflet carefully. If you have any concerns or questions contact the Clinical Neurophysiology Department as soon as possible.

### **Neurophysiology Department**

Monday–Friday , 08:30–16:30

### **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).