



EEG examination

This leaflet outlines what to expect when you come into hospital for an EEG examination to try to find the cause of your symptoms.

What is an EEG?

An EEG is an ElectroEncephaloGram, which is the recording of electrical activity produced by the brain.

How is it done?

A clinical physiologist will take measurements of your head and make some marks on the skin. They will gently rub over the marks and then attach around 22 small metal discs using a sticky paste. Each disc is attached by a lead to a monitor. A recording is then made.

You will be lying or sitting during this time and the clinical physiologist will ask you to follow instructions, such as to open or close your eyes.

The test will take about one hour, after which the discs and paste will be removed and you will be able to go home, work or school. Some patients prefer to go home and wash their hair before returning to other activities.

History of symptoms

It may be helpful to bring someone along with you who has seen your attacks, and/or bring a home video.

Will I feel anything?

You will feel the skin being rubbed before the discs are put on your head, but the test is otherwise painless. No needles are involved.

What other measurements are made?

Some of the following may be needed during the test:

- **Deep breathing:** This may produce changes in your brainwave activity that could help with your diagnosis. You will be asked to take deep breaths for about 3 minutes. This often causes a light-headed feeling or tingling in the lips or fingers. This is normal and will pass off when you return to normal breathing.
- **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. Very rarely the deep breathing or photic stimulation may cause a seizure, but the clinical physiologist will be observing the EEG closely and will modify the test if you appear to be sensitive to either procedure.
- **Video:** A video recording of the examination is usually made as part of the test.

What preparation is needed?

- Please come with clean hair, free from grease, hair spray etc. Head lice must be treated. You may want to bring a comb / brush with you.
- Loose clothing will be most comfortable. Jewellery may have to be removed.
- If you take any medicines or tablets, you should continue to take them at the usual times. You may also eat and drink normally beforehand.

Can the EEG monitor read my mind?

No, we only record the electrical activity from your brain, and are not able to read any thoughts or emotions you may have.

Is this shock treatment?

No, we are only recording signals produced naturally. This is a test not a treatment.

What happens if I have a seizure during the test?

If you have an attack during the test, we will make sure you are well enough to go home. If you hold a driving licence, you will need to inform the DVLA (as for all attacks): this may affect your ability to hold a driving licence.

Will I get the result the same day?

No, the results need to be analysed afterwards and a full report will be sent to the doctor who referred you for the test.

If you have any questions or concerns, and if you have any allergies, please talk to the clinical physiologist before the start of the test.

Contacting us

Neurology Clinical Admin Team (CAT 10)

Telephone: 0118 322 5474

Email: rbb-tr.CAT10@nhs.net

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Neurology, September 2025

Next review due: September 2027