

# Routine EEG

**This leaflet explains about routine EEG. If you have any questions or concerns about the test or recording period, please contact the department, t: 020 7188 9209, Monday to Friday, 8.30am-5pm to discuss them.**

You can find out more by watching our two films about having an EEG in hospital and at home. Please visit [w: www.evelinalondon.nhs.uk](http://www.evelinalondon.nhs.uk) and search 'Having an EEG'.

We look forward to welcoming you to the Puffin EEG Department (1<sup>st</sup> Floor), Evelina London Children's Hospital.

**As the test takes up to an hour, it is essential that you arrive in time for your appointment. If you arrive late, your appointment may have to be rescheduled.**

## What is an EEG?

An EEG (electroencephalogram) is a test to record the electrical activity of your child's brain. The nerve cells in the brain produce tiny electrical signals. Recording and checking these can give doctors useful information about how your child's brain is working. EEGs can be used to diagnose and monitor seizure disorders, sleep disorders, movement disorders, development and changes in behaviour. These are commonly known as events.

## What are the benefits of an EEG?

An EEG can help doctors to diagnose epilepsy or to find out more about the type of epilepsy your child has. Recording the EEG during drowsiness and sleep can help with diagnosis.

## Are there any risks associated with EEG?

There are no known risks or side-effects of having an EEG.

## Are there any alternatives?

There are no alternative tests. The EEG is not a brain scan.

## What happens during the test?

The test takes about one hour. A clinical physiologist (specialist in the electrical function of the brain) will prepare your child for the test. They will mark measurements on your child's head with a soft crayon. After gently rubbing a gel over the marks, the physiologist will attach 22 electrodes (small discs) using a special adhesive. During this preparation your child can sit on your lap, looking at books or playing with toys. We have many in the department, or you may want to bring your child's favourite book, toy or comforter with you.

Your child will be made comfortable either sitting on a chair or lying on the bed. You will be able to sit beside them, if you want. The electrodes are connected to the EEG computer. This picks up electrical signals from your child's brain and they are recorded as wavy lines.

During the test your child may:

- be asked to close their eyes for short periods
- be asked to take deep breaths and blow a windmill. This may produce changes in the electrical activity of your child's brain that could help in diagnosis.
- have a light flashed in front of them, with their eyes open and closed. This is called photic stimulation. It is an important part of the test for children who may have seizures or blackouts caused by flashing lights. This, very rarely, may cause a seizure if your child is one of the few people that are very sensitive to flashing lights. If this appears to be the case, the light will be stopped.

We will make a video recording of your child while the EEG is taken. This helps us when we interpret the EEG and to make a diagnosis. We can observe any changes, for example in your child's breathing or movements, which may be associated with seizure activity on the recording. You will be asked to give your consent.

### **Will your child feel any pain or discomfort?**

Your child will feel their skin being rubbed and the discs being pressed onto their head, but the test should be painless.

### **What happens if your child has a seizure during the test?**

It is unlikely that the test will make them have a seizure. If a seizure happens, care will be provided in the department until your child is well enough to leave.

## **Consent - asking for your consent**

We want to involve you in decisions about your child's care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree for your child to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

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

The discs are removed and your child will be able to go home or to school. Small pieces of sticky paste may be left in your child's hair - these will wash out with shampoo.

## **When will you get the results?**

The results of the test need to be analysed and a full report will be sent to the doctor who asked for the test. The doctor should arrange with you when and how you will receive the results.

## **Is there anything you need to do to prepare?**

You should continue to give your child any medicines they take regularly.

Please wash your child's hair the night before or on the day of the test and do not use any hair products such as gels, oil, wax or sprays. This will help stick the electrodes to your child's head. It is important for the child who is having the test, to be quiet and relaxed.

If you have other children, it is best if they can be looked after at home or by another adult if they come with you.

## Contact us

If you have any questions or concerns about please contact the department,  
**t:** 020 7188 9209, Monday to Friday, 8.30am-5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit **w:** [www.evelinalondon.nhs.uk/leaflets](http://www.evelinalondon.nhs.uk/leaflets)

## Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline.

**t:** 020 7188 3003, Monday to Friday, 10am-5pm **e:** [letstalkmedicines@gstt.nhs.uk](mailto:letstalkmedicines@gstt.nhs.uk)

## Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS) **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints) **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

## Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch.

**t:** 020 7188 8815 **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

## NHS website

Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.

**w:** [www.nhs.uk](http://www.nhs.uk)

## Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.

**t:** 0800 731 0319 **e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk) **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)

## Was this leaflet useful?

We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, **w:** [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets), or **e:** [patientinformationteam@gstt.nhs.uk](mailto:patientinformationteam@gstt.nhs.uk)

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A list of sources is available on request