

# EEG (Electroencephalogram)

## Patient Information – Clinical Neurophysiology

### The Standard EEG

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#### What is an EEG?

An EEG, which is short for electroencephalogram, records the patterns of electrical activity from the billions of nerve cells in the brain.

#### What is the EEG for?

It is used as an aid in diagnosing the cause of seizures and other conditions.

#### Who does the recording?

A specialist will have referred you for an EEG.

A Neurophysiology Technician will carry out the recording. Either a Neurologist or Paediatric Neurologist, who are both specialists in interpreting EEG recordings, will report on the findings.

#### What happens in an EEG?

- The technician explains what is involved and will try to ensure you feel relaxed.
- The technician will use a cap with disc electrodes already inserted. Each one of the discs will have paste squeezed into it with a syringe and small tube. You will also feel a slight scratch to your scalp.
- You will then be asked to lie down and the cap is connected by a lead to the EEG machine.
- You will be asked to keep very still as movement can interfere with the recording.

#### During the recording you may be asked to do some simple tasks:

- To open and close your eyes several times
- To breathe deeply for approximately three minutes
- To look at a flashing light (stroboscope)

#### How long does the EEG last?

Please allow one hour for the entire procedure.

This allows time for the technician to explain the procedure, position the electrodes and complete the recording.

Children under 5 years - recording time is 10 minutes.

Older children and adults - recording time 20 minutes.

#### What does the EEG machine do?

The EEG machine is really an amplifier. The electrical activity from the brain is very tiny and the EEG machine magnifies and displays it on a computer screen. The electrical activity appears as waves on the screen.

#### Should medication be stopped before an EEG recording?

No. Medication should never be altered unless directed by a doctor.

### **Who gives you the results of the EEG?**

Either the referring specialist or your GP will give you the result of the EEG. It may take up to two weeks for the results to be available. The technician, who records the EEG, is not able to give you any results on the day.

### **Can the result of an EEG be wrong?**

If no abnormal activity shows up on an EEG, it does not necessarily mean that you do not have a disorder or that further turns will not occur.

The results of the EEG are considered along with the results of other tests and with the history and examination findings, to help the specialist with the diagnosis and management of your case.

### **Are there any after effects?**

No, but you may feel the need to wash your hair afterwards.

### **Please ensure you have**

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Allowed one hour for the EEG recording and you are on time.

Your EEG may be cancelled if you are late. Our appointments are tightly booked.

- A list of your current medication.
- Clean, dry hair. Absolutely no product in your hair. This includes wax, gel, oil and spray.
- Removed earrings and studs from your earlobes
- Turned off your cellphone
- A support person is welcome. One other person may stay for the entire recording.
- Parents/caregivers are welcome. If your child has a cuddly or soft toy that helps them settle, please bring these with you
- If your baby takes a bottle, please bring one along.

### **Please assume that you or your child will be having a STANDARD EEG**

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If your consultant has ordered any of the other types of EEG we will indicate below:

#### **A Sleep deprived EEG**

Only allow yourself half your usual sleep time e.g. go to bed late and get up early.

Do NOT drink any caffeine drinks on the day of the test.

#### **An EEG under Sedation**

- The referring paediatrician has requested that the EEG be recorded following sedation.
- Please report to Children's Day Stay Unit on Lower Ground Floor, Riverside Building for your child's sedation at \_\_\_\_\_
- No food or milk for 4 hours before the sedation. Can have water up to 2 hours before the sedation.

## What happens to the information obtained?

All stored information is placed on your confidential medical record.

\* Christchurch Hospital is a teaching hospital and CDHB is involved in the education of medical and other health professionals. A technician will ask you if necessary, if you are comfortable for medical (or other health professionals), students or trainees to use your stored information for education and training purposes.

## Further information

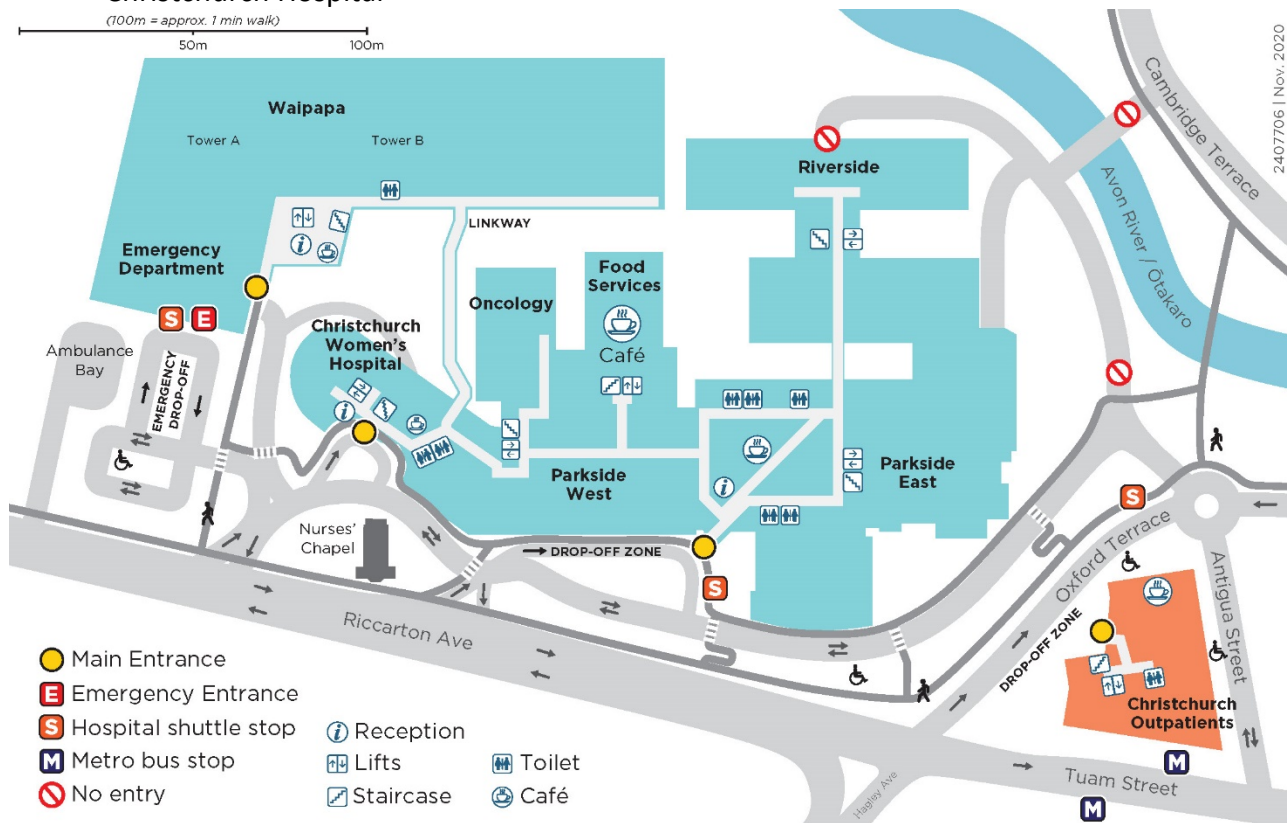
If you have any questions to ask about the monitoring process before your test, please telephone (03) 364 0949.

For more information about:

- **parking** information, go to [www.cdhb.health.nz/patients-visitors/transport-parking/](http://www.cdhb.health.nz/patients-visitors/transport-parking/)
- hospital and specialist services, go to [www.cdhb.health.nz](http://www.cdhb.health.nz)
- your health and medication, go to [www.healthinfo.org.nz](http://www.healthinfo.org.nz)

## Location – please note, access is only via the main entrance, Christchurch Hospital

Clinical Neurophysiology  
Level 3  
Riverside Building  
Christchurch Hospital



## Notes

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