

## What Is an EEG?

An **electroencephalogram (EEG)** is a test used to evaluate the electrical activity in the brain. Brain cells communicate with each other through electrical impulses. An EEG can be used to help detect potential problems associated with this activity.

The test tracks and records brain wave patterns. Small, flat metal discs called electrodes are attached to the scalp with wires. The electrodes analyze the electrical impulses in the brain and send signals to a computer, where the results are recorded.

The electrical impulses in an EEG recording look like wavy lines with peaks and valleys. These lines allow doctors to quickly assess whether there are abnormal patterns. Any irregularities may be a sign of seizures or other brain disorders.

## Why Is an EEG Performed?

An EEG is used to detect problems in the electrical activity of the brain that may be associated with certain brain disorders. The measurements given by an EEG are used to confirm or rule out various conditions, including:

- seizure disorders (such as epilepsy)
- a head injury
- encephalitis (an inflammation of the brain)
- a brain tumor
- encephalopathy (a disease that causes brain dysfunction)
- memory problems
- sleep disorders
- stroke
- dementia