

What is an EEG?

An EEG (or *electroencephalogram*) is a **non-invasive and totally safe technique** that allows us to **record the electrical activity** produced by billions of cells in the brain by using a net covered with sensors. Brain cells generate electrical impulses that carry messages from one part of the brain to another that control

memory, attention, emotions, language and other sensory functions. These electrical messages produce certain wave patterns, which will be the object of our analysis. **IMPORTANT:** This tool allows us to record electrical brain activity from the surface. It **DOES NOT** stimulate the brain.

What does an EEG session involve?

Before the EEG session starts, we need to put a special cap in the head of your child that has many sensors attached. These sensors are covered in a sponge cushion which is soft, and which is the only point of contact between the cap and your child's skin. For a better signal detection, these sponge cushions are soaked in a saline solution with shampoo. These sensors are the responsible to pick up the brain's electrical impulses and send them to the EEG machine where they are recorded on a computer.

During the test, your baby will be seated on your lap in front of a monitor where the stimuli will be displayed. At this stage, we will ask you to keep an eye on your infant's hands in case he/she tries to take off the net or starts playing with the sensors. The reason for these instructions is to get a better EEG recording since the movement of the sensors produces a noisy signal, difficult to interpret.

After the EEG, the net will be removed carefully and a towel will be provided to dry the infant's hair.



REMEMBER: This tool is **not painful, non-invasive and is totally safe**. It has been used for a long time with adults, children and infants to investigate multiple cognitive processes such as language, memory or empathy.