

Evoked Potential Test

If you have any questions, please ask your physician or nurse.

An evoked potential (EP) test measures electrical activity from the brain, spinal nerves or sensory receptors caused by stimulation, such as light, sound, or touch. Small discs (electrodes) are applied to the scalp and other areas of the body. As different types of stimuli are given, the electrodes record the responses of the brain. This information is plotted on a graph and interpreted by a neurologist. The 3 most common types of EP tests are the:

- Brainstem auditory evoked response (BAER) test
- Visual evoked potential (VEP) test
- Somatosensory evoked potential (SSEP) test

How to prepare for the test

- Remove hairpieces or unbraid your hair.
- Wash your hair on the day of the test. Do not put oil, conditioner or hairspray in your hair.
- Bring the following with you:
 - Photo ID
 - Medical insurance/Medicare card

Come to the Neurological Testing Center on the 7th floor of Galter Pavilion, 201 East Huron Street. Parking is at 222 East Huron Street. For a discounted rate, bring your parking ticket with you. Your ticket can be validated at the Customer Services Desks on the 1st, 2nd and 8th floors of Feinberg and Galter pavilions.

What to expect

The BAER test helps to assess the auditory (hearing) nerve pathways from the ears through the brainstem. The technologist will put electrodes on your scalp and earlobes. You will wear earphones and listen to a series of clicks and tones.

The VEP test helps to assess the visual nervous system from the eyes to the occipital (visual) cortex of the brain. The technologist will put electrodes on your scalp. You will be asked to watch a checked pattern on a screen while staying alert. We will test each eye separately.

The SSEP test helps to assess pathways from nerves in the arms or legs, through the spinal cord, to the brain. The technologist will put electrodes on your scalp and on your back over the spine. A small electrical current will create a tingling sensation that may cause some mild discomfort. We will test each arm or leg separately.

After the test

When the test is finished, the tech will remove the electrodes and wash the paste off your scalp. You may wish to wash your hair at home with warm water and a washcloth to remove any residue. Check with your physician in 2 business days to discuss the results and further treatment.