Visual Evoked Potential (VEP)

What you need to know

This handout explains a visual evoked potential (VEP) test that looks at how your optic (vision) nerve sends information from your eyes to your brain. VEPs are done by a technologist, and the findings are looked at later by a doctor.

What is a VEP?

A VEP is a test that looks at how your optic (vision) nerve sends information from your eyes to the part of your brain that controls vision.

We do 2 types of VEP tests:

- **Pattern reversal evoked potential (PREP)**
- **Flash evoked potential (FEP)**

FEPs are done only for people who cannot complete a PREP. This usually includes young children and some adults.

How should I prepare?

- If you are having a PREP, please be well-rested. It is important that you stay awake and relaxed during the test.
- If a young child is having an FEP, it is best for them to nap during the test. Parents may bring the child’s favorite blanket or toy, or formula to feed the child.
- Make sure your hair and scalp are clean. Do **not** use hair products such as gel, mousse, hairspray, or conditioner.
- Do **not** wear eye makeup. Do **not** wear earrings.
• Bring your corrective lenses (glasses or contact lenses) with you. We want you to see the best you can during this test.

• You may eat and take your regular medicines before and after the test.

**How does the test work?**

First, your *visual acuity* (how well you see) will be tested.

A technologist will then:

• Measure and mark spots on your head.

• Rub a gel onto spots on your head and earlobes and attach small metal discs (*electrodes*).

Your eyes will be tested 1 at a time. You will wear a patch over the eye that is not being tested.

You will sit in front of a screen that has a black-and-white-checkerboard pattern. The pattern moves back and forth. You will focus on a dot in the middle of the screen.

It is important for you to stay alert, focused, and relaxed.

The PREP test usually takes about 1 hour.

**An FEP**

Only when needed, we will do an FEP. For the FEP:

• More metal discs will be placed near your eyes.

• You will be tested with light flashes that come from an open, globe-like device or goggles.

The FEP usually takes 1 to 2 hours.
How do I get my test results?

A neurophysiologist (a doctor who specializes in conditions of the nervous system) will send your test results to your doctor who referred you to us. Your own doctor will talk with you about your results.

Where will the test be done?

Your test will be done in Neurodiagnostics, on the 7th floor of the medical center. Take the Pacific elevator to the 7th floor.

Please arrive 5 to 10 minutes before your appointment time and check in at our reception desk in 7-East.

If you need to reschedule your test, please call 206.598.4211.

How to Find UWMC

UWMC is at 1959 N.E. Pacific St., Seattle, WA 98195. For driving directions, ask for our handout “Driving Directions and Parking.” Or, find this handout online at: https://healthonline.washington.edu/document/health_online/pdf/Driving-Directions-Parking.pdf

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Neurodiagnostics, 7-East: 206.598.4211, weekdays from 8 a.m. to 4 p.m.