
Diagnosing Epilepsy

Your primary healthcare provider may be the first healthcare provider to evaluate you for epilepsy. They may then refer you to a specialist for further evaluation. This specialist may be a doctor who treats the brain (neurologist). Or it may be a neurologist who specializes in seizure disorders (epileptologist). Your evaluation will include a health history, physical and nervous system exams, and tests. An epilepsy diagnosis is typically made when someone has more than one seizure for no clear reversible reason (an unprovoked seizure).

Health history

This is the key part of your evaluation. The healthcare provider will ask you to describe your seizures. They may also want to talk with family or friends who have seen your seizures. And they will ask about your risk factors. These are things that make you more likely to have epilepsy, such as:

- Being born before your due date (premature birth)
- Oxygen deprivation during birth
- A family history of epilepsy
- Past nervous system infection, such as meningitis or encephalitis
- A past head or brain injury or surgery
- Past stroke or brain tumor
- A history of childhood seizures caused by high fever (febrile seizures)
- Using illegal drugs or alcohol
- Some genetic disorders
- Alcohol or drug abuse or withdrawal
- Alzheimer disease
- Gluten intolerance or celiac disease
- Abnormal fluid buildup around the brain (hydrocephalus)
- Withdrawal of antiepileptic medicines, even when they are used for other conditions (such as gabapentin for pain)

Physical and nervous system exams

The physical exam checks your overall health. Your pulse, blood pressure, and temperature are taken. The neurologic exam checks certain functions of your brain. These include reflexes, balance, muscle strength, and coordination. Mental skills, such as language and memory, and nerve function of the body are also checked.

Tests for epilepsy

After the exams are done, you may need some tests. Electroencephalogram (EEG) and MRI are the most common tests used to support a diagnosis of epilepsy. Sometimes a lumbar puncture is needed. This is often done if the healthcare provider thinks there may be infection or inflammatory disorders of the brain.

Electroencephalogram (EEG)

An EEG records electrical activity in the brain. It can show abnormal signals that may mean seizure activity. In some cases, it can point to the part of the brain where seizures might start.

Imaging tests

These may be used to create detailed pictures of the brain. These tests include MRI and CT scans.



Blood tests and other tests

You may have a blood sample taken and tested. Other tests may also be done. These tests can help rule out certain health problems or provide more information.