

Seizures and Epilepsy

What is a seizure?

A seizure is a combination of physical and behavioral changes (including sometimes strange sensations or emotions) that happen when there is a sudden surge of abnormal electrical energy in the brain. Anything that disturbs the normal pattern of electrical activity in the brain can cause a seizure. Some of these events are barely noticeable, while others can be disabling. A seizure can last from a few seconds up to several minutes.

What is epilepsy?

Epilepsy is a chronic condition that involves “unprovoked” seizures, meaning that they are not caused by some other medical problem or trauma to the brain. The cause is often unknown. A person is diagnosed with epilepsy if they have 2 or more unprovoked seizures or 1 unprovoked seizure caused by something that will likely trigger more seizures (such as a physical change in the brain).

How do I know if I’ve had a seizure?

There are many conditions with symptoms similar to a seizure, such as passing out, stress, non-epileptic events, and some movement disorders. Depending on the area of the brain affected, seizure symptoms can be physical, behavioral, or emotional as follows:

- **Physical symptoms** can include:
 - Blacking out briefly and then feeling confused
 - Having uncontrollable muscle spasms (with twitching and jerking limbs)
 - Stopping breathing temporarily



What do I need to do next?

- 1 Ask those around you to help you keep track of what happens when you have an event that could be a seizure.
- 2 Talk to your doctor about the impacts of your seizures, including the ability to drive, and special considerations for pregnancy.
- 3 Manage mood problems. Keep a diary of your moods and any medicine changes to see if there are links between the two. Exercise and go to bed at the same time each night to help manage depression and anxiety.
- 4 Review the information about what you and your friends and family can do to both prevent and support you during and after a seizure ([page 4](#)).

- Drooling or frothing at the mouth, having abnormal eye movements, or grunting and snorting
- Losing bladder and bowel control
- Shaking of the entire body or falling suddenly
- Tasting a bitter or metallic flavor
- Clenching the teeth
- **Behavioral symptoms:** Unusual behaviors such as picking at one’s clothes or suddenly becoming aggressive
- **Emotional symptoms:** Becoming suddenly angry, feeling unexplainable fear, panic, or joy, or laughing for no reason

If you (or someone you are with) experiences an event that seems like a seizure, your doctor will want a detailed description of what happened from the start to the end of the event.

How is epilepsy diagnosed?

First, your doctor will need to find out what might have caused your seizure or similar event. To do so, your doctor will likely order brain imaging (a brain CT and MRI) to look for physical changes in your brain or an **electroencephalogram** [ih-lek-troh-en-SEF-uh-luh-gram] (or EEG) to look for electrical changes in your brain.

Your doctor may diagnose your seizures as epilepsy if you have had 2 or more seizures not directly caused by other medical problems. Of those who have only 1 seizure of **unknown cause**, less than half will have another seizure. If it occurs, a second seizure usually happens within 6 months.

When there is a **known cause** for a seizure, there is more risk for experiencing future seizures. In this case, your doctor will likely recommend anti-seizure medicines to prevent future events.



Where can I learn more?

For information on seizures and epilepsy or to find resources to help in your care or the care of your loved one, please visit the following trusted websites:

- The Epilepsy Foundation—
<https://www.epilepsy.com>
- The American Epilepsy Society—
https://www.aesnet.org/for_patients
- National Association of Epilepsy Centers—
<https://www.naec-epilepsy.org/for-patients/patient-resources/>

Access Utah driving license restriction information for seizures at <https://dld.utah.gov/other-resources/medical-standards/>

How is epilepsy treated?

You will likely see a **neurologist** [noo-ROL-uh-jist], who is specially trained to treat epilepsy. The neurologist can discuss treatment options including medicine, surgery, diet, and devices.

Medicines. For most people, seizures can be prevented with medicines that affect the electrical activity in the brain. These medicines do not either cure seizures or stop a seizure once it starts. Your doctor will work to find the lowest dose that will prevent your seizures and minimize side effects.

Many people experience few or no side effects or only deal with side effects for several weeks or months. In the first few weeks of taking anti-seizure medicines, you might experience side effects that include:

- Feeling tired
- Stomach upset or discomfort
- Feeling dizzy or having blurred vision
- Breaking out in a rash

More serious side effects can impact the liver or pancreas or cause a serious decrease in white blood cells and platelets that help your body fight infection and control bleeding. Talk to your doctor about any possible side effects for your medicines.

Surgery. For some patients, especially those with brain structural problems, there are surgical procedures that may help. Surgery is an alternative only when seizure medicines have not helped, typically for 1 to 2 years.

Dietary changes. For some children and adults, combining anti-seizure medicines with special diets can help control seizures. These diets, which are typically higher in fat and lower in carbohydrates are called **ketogenic** [kee-toh-JEN-ik] diets. Ask your doctor if dietary changes could help in your situation.

Devices. If seizure medicines don't control seizures, another option is a type of therapy called **neuromodulation** [noo-roh-mod-uh-LEY-shuh n]. This therapy involves a device that sends small electrical signals to the brain. These signals change the electrical activity in the brain to help prevent seizures.

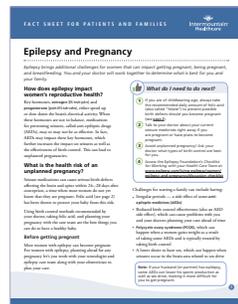
How could epilepsy and seizures impact my life?

Having seizures and epilepsy can impact people's relationships, work, driving, and safety. Often these impacts cause more difficulties than the seizures themselves.

Mood problems. Many people with seizures experience depression and anxiety due to the fear of having a seizure, changes in job or school situations, and potentially not being able to drive. In addition, mood changes can result from how seizures and the medicines to prevent them may affect your brain.

Talk with your doctor about your concerns related to your mood. Be sure to get treatment for depression or anxiety as this will help control your seizures as well. Consider joining a support group (see "Where can I learn more" on [page 2](#)).

Pregnancy. Epilepsy doesn't mean that you can't become pregnant or have a healthy baby. But, it may involve additional risks for you and your baby. Talk to your doctor if you are now or want to become pregnant. When properly managed, 9 out of 10 pregnant women with epilepsy have healthy babies. See Intermountain's fact sheet, [Epilepsy and Pregnancy](#), for more information.



Driving. Depending on your seizures, medicines, and experience, your doctor will discuss the safety of driving and if any restrictions to your license are necessary to keep you and other drivers safe. For state-specific requirements, see Intermountain's fact sheets on [Seizures and Driving](#) (in [Utah](#)) or (in [Idaho](#)).



Staying safe. A seizure itself is rarely a major hazard. Hazards depend on what you are doing when a seizure happens. If seizures are under control for several months, most activities are safe. **To prevent hazards, avoid:**

- **Baths** to prevent drowning (take showers instead), and lower the temperature of your water heater. If taking a bath, always have someone nearby in case of a seizure.
- **Swimming** until you have gone for 3 months without a seizure. Never swim alone, and be sure to swim with someone who is strong enough to pull you out of the water in an emergency. If you're swimming in a lake or the ocean, always wear a life jacket.
- **Riding a bicycle** until several months after a seizure. Make sure to ride in non-traffic areas, and always wear a helmet!
- **Skiing or any other risky activity** before your doctor says it's safe. This is usually after seizures are controlled for 3 or more months. Call your doctor if you are unsure about an activity.

