

Use this guide as a resource for next steps if you have been diagnosed with nonepileptic seizures.

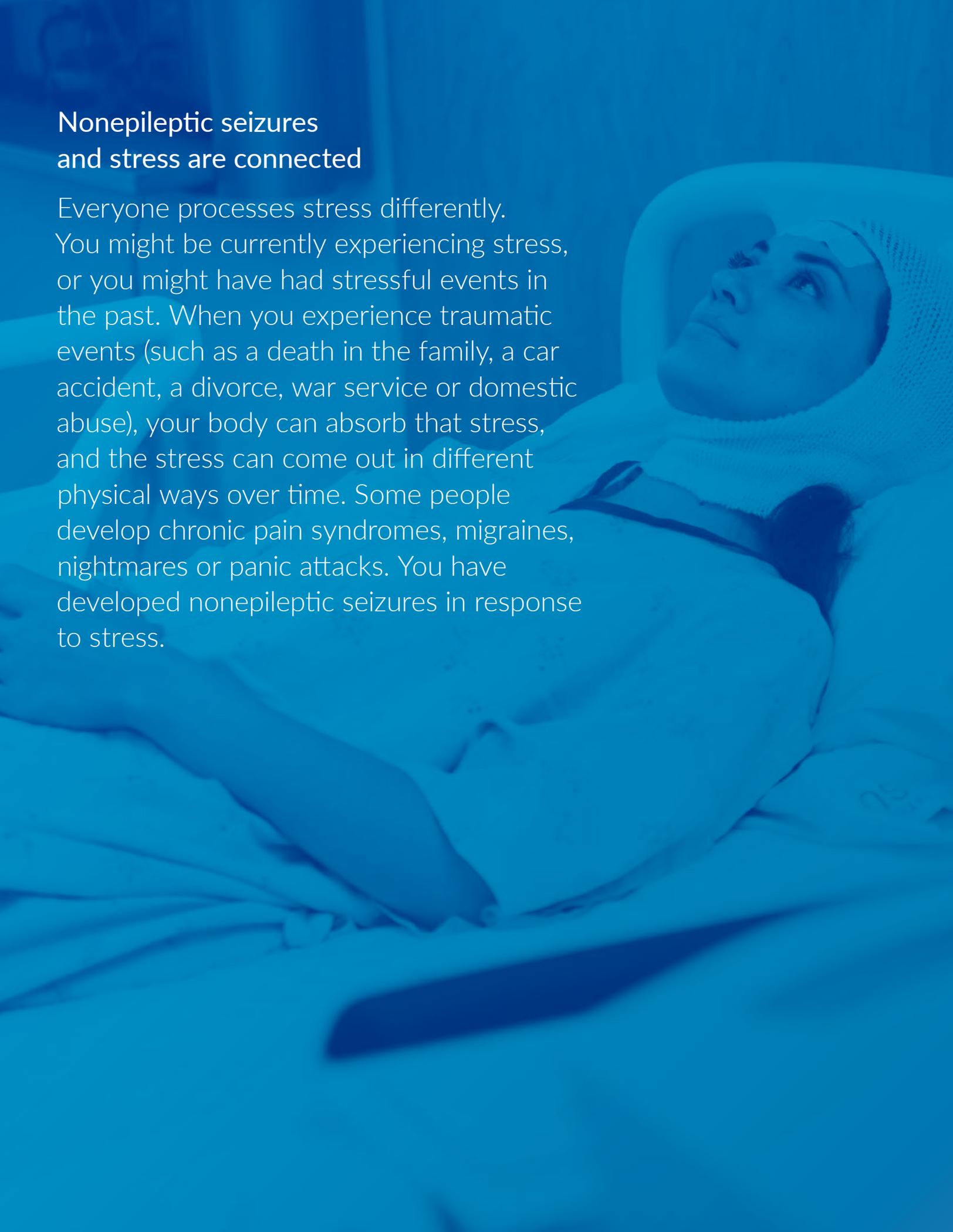
## Understanding Nonepileptic Seizures

A guide for patients and families



## Nonepileptic seizures and stress are connected

Everyone processes stress differently. You might be currently experiencing stress, or you might have had stressful events in the past. When you experience traumatic events (such as a death in the family, a car accident, a divorce, war service or domestic abuse), your body can absorb that stress, and the stress can come out in different physical ways over time. Some people develop chronic pain syndromes, migraines, nightmares or panic attacks. You have developed nonepileptic seizures in response to stress.



## Epileptic seizures vs. nonepileptic seizures (NES)

An epileptic seizure is a sudden, unpredictable episode where the brain temporarily loses control of the body in response to abnormal electrical signals from the brain. Nonepileptic seizures look like epileptic seizures, but they are not an electrical problem and instead stem from stress and trauma. Both types of seizures are involuntary, meaning the person does not have control over when and where they happen.

### Seizure symptoms

When a person has either type of seizure, they might experience these behaviors:

- Staring into space
- Being unable to speak
- Uncontrolled shaking
- Loss of awareness
- Other neurological symptoms

CAUSES OF SEIZURES	
EPILEPTIC	NONEPILEPTIC
 <p><b>Abnormal electricity in the brain</b></p> <p>Epilepsy is a neurological disorder related to physical damage or genetic differences in the brain. Epilepsy can be caused by a brain injury, brain tumor, infection, genetic disorder or other factors.</p>	 <p><b>Stress, traumatic experiences</b></p> <p>Traumatic experiences and stress cause changes in the brain. When your brain has built up too much stress, there is a disconnection between your brain and your body, which can cause a nonepileptic seizure.</p>

## Treatment for NES

The good news is that NES can be treated without medications or surgery because your brain is not physically damaged. The best way to treat NES is with cognitive behavioral therapy.

## Cognitive behavioral therapy (CBT)

CBT is a science-backed practice that is proven to help treat nonepileptic seizures. CBT retrains the brain to process stress differently, so that it stops causing physical symptoms. Several studies have shown that CBT is an effective treatment for NES.

When you experience stress, your thoughts — not other people, situations or events — cause the stress. A cognitive behavioral therapist helps you learn how to process and manage stress differently so that it stops causing nonepileptic seizures. The majority of people who complete a CBT program stop having NES.

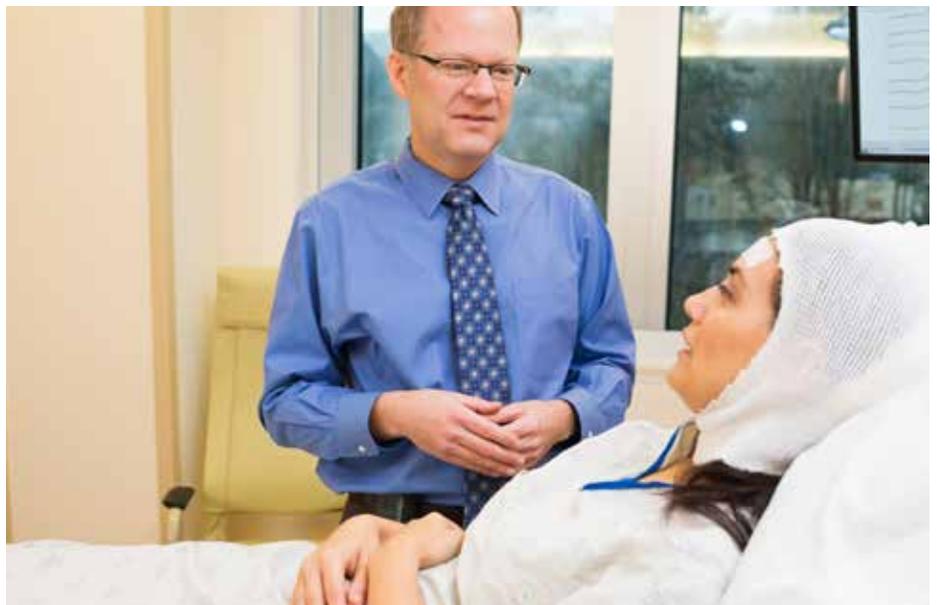
## Medications

Some people benefit from taking psychiatric medications during and after therapy to better manage stress. Medications for treating epilepsy do not work for nonepileptic seizures.

## Frequently asked questions

### How can I be sure this is the right diagnosis?

The most reliable test is video electroencephalogram (EEG) monitoring, which is the only way to be sure. This procedure monitors a patient for several hours to several days with a video camera and an EEG until a seizure occurs. By analyzing the video and EEG recordings, epilepsy specialists can make the diagnosis with nearly 100 percent accuracy.



OHSU can help you find a cognitive behavioral therapist.

Nonepileptic seizures are not unusual. At OHSU, 2 in 5 patients who are tested for epilepsy in the epilepsy monitoring unit have NES.

## LEARN MORE

Watch a video about OHSU's epilepsy monitoring unit at [www.ohsu.edu/emu](http://www.ohsu.edu/emu)

### What if I also have epilepsy?

It's possible to have both epilepsy and nonepileptic seizures. Only about 10 percent of patients with NES also have epilepsy. If you have both types, it is very important to discuss the differences between the two types with your doctor. Many people can learn to tell the difference between their epileptic and nonepileptic seizures.

### Why did my other doctor say that I had epilepsy?

It can be very difficult to tell the difference between seizure types just by observing, and few providers have access to video EEG monitoring. About 80 percent of patients who have nonepileptic seizures report they tried epilepsy medications first before coming to an epilepsy center for additional testing after the drugs didn't stop their seizures.

### Should I stop taking my epilepsy medicine?

Not until you talk with your provider. You'll need to slowly reduce your antiepileptic drugs with the supervision of your neurologist until they give you the OK to stop taking them. Your neurologist may continue to see you to assist in care, but a mental health professional will be your primary resource for NES treatment.

### Do I really need mental health therapy to treat NES?

It makes sense to get treatment from a person trained to help you. Providers with special training in psychological issues (psychiatrists, psychologists or clinical social workers) can best identify what is causing you stress, and help you reduce or eliminate your seizures.

Having NES may also cause or contribute to other conditions, such as depression and anxiety. Treatment may involve therapy, stress reduction techniques (such as relaxation and biofeedback training) and personal support to help you cope with the seizures during the course of treatment. Other types of therapy used to treat NES include dialectical behavioral therapy (DBT) or eye movement desensitization and reprocessing (EMDR). Treatment may also emphasize general wellness, such as nutrition, sleep, exercise and social support systems.

### If I don't have epilepsy, can I drive?

There is no law that regulates driving for people with nonepileptic seizures, but decisions on driving are made on a case-by-case basis. You should discuss driving safety with your doctor.

Another term for NES is psychogenic nonepileptic seizures, or PNES. You may have heard the term "pseudo-seizures" before, which is an older term for NES that neurologists no longer use.

## Next steps

OHSU will give you a list of mental health providers who take your insurance and do CBT upon request. You can also research therapists and review which therapists take your insurance at [psychologytoday.com](http://psychologytoday.com).

We will let your neurologist and primary care doctor know about the results of your video EEG testing and treatment recommendations. We will communicate these results with your therapist if you already have one.

## Questions?

Call the Epilepsy Clinic at 503-494-7772.

## About the OHSU Brain Institute

The OHSU Brain Institute is a national leader in neuroscience patient care, research and education. We provide the most comprehensive care for neurological conditions in the Northwest.

### ADDITIONAL RESOURCES

#### Epilepsy Foundation

[www.epilepsy.com/learn](http://www.epilepsy.com/learn)

#### Functional Neurological Disorder (FND): A Patient's Guide

[www.neurosymptoms.org](http://www.neurosymptoms.org)

This website explains nonepileptic seizures as well as other neurological symptoms related to malfunction of the brain and nervous system resulting from stress, trauma and other causes.

#### Psychology Today

[www.psychologytoday.com/us](http://www.psychologytoday.com/us)