Seizure and Epilepsy Overview

What is epilepsy?
Epilepsy is a neurological disease that causes people to have recurrent seizures. A seizure is a brief disruption of electrical activity in the brain.

- Epilepsy is not contagious.
- Epilepsy is not a mental illness.
- Epilepsy is not a developmental disability.

What causes epilepsy?
More than half the time, the cause is unknown. When a cause can be found, it is most often one of these:

- Head injury
- Infection of the brain
- Stroke
- Brain tumor
- Alzheimer's disease
- Malformation of an area of the brain
- Genetic factors

Who has epilepsy?
In the United States, 3 million people live with epilepsy, and over 150,000 new cases are diagnosed each year. **One in 26 people** will develop epilepsy at some point in their life. Epilepsy doesn't discriminate. It affects children and adults, men and women, and people of all races, religions, ethnic backgrounds, and social classes. While epilepsy is most often diagnosed either in childhood or after the age of 65, it can occur at any age.

How is epilepsy diagnosed?
Medical history, neurological examination, blood work, and other tests are important in diagnosing epilepsy. Eyewitness accounts of a person's seizures are crucial in determining the type of seizure(s) a person has. An electroencephalograph (EEG) is commonly used to help diagnose seizures. The EEG records the brain's electrical activity. Some patterns of activity are unique to particular types of seizures. In some cases, CT scans, MRIs, and PET scans may be used to look at the internal structure and function of the brain to help pinpoint causes of seizures and epilepsy.

How is epilepsy treated?

- **Medication:** Anti-seizure medications are used to treat epilepsy, with more than 30 available. About 7 in 10 people achieve good seizure control with one or more of these medications.
- **Surgery:** Certain types of surgery may be recommended for people whose seizures do not respond to medication, especially when the seizure focus can be determined and removal of part of the affected area won't harm vital functions like speech or movement.
- **Vagus Nerve Stimulation (VNS)**: A small device is implanted under the skin on the left side of the chest. A lead (thin wire) goes from the device to the vagus nerve in the neck. VNS can reduce seizures by 50% or more in 4 to 5 out of 10 people after one or two years.
- **Responsive Neurostimulation (RNS):** A device placed under the scalp in a small area of the skull monitors brain activity and sends small pulses of electrical current to help stop or lessen seizures. It may help reduce seizures by 40% to 60% after one to three years.
- **Dietary Therapies:** The ketogenic diet (high fat, low carbohydrate) can help control seizures in about 2 out of 3 children who stay on the diet. Other diets may also help reduce seizures in some people.

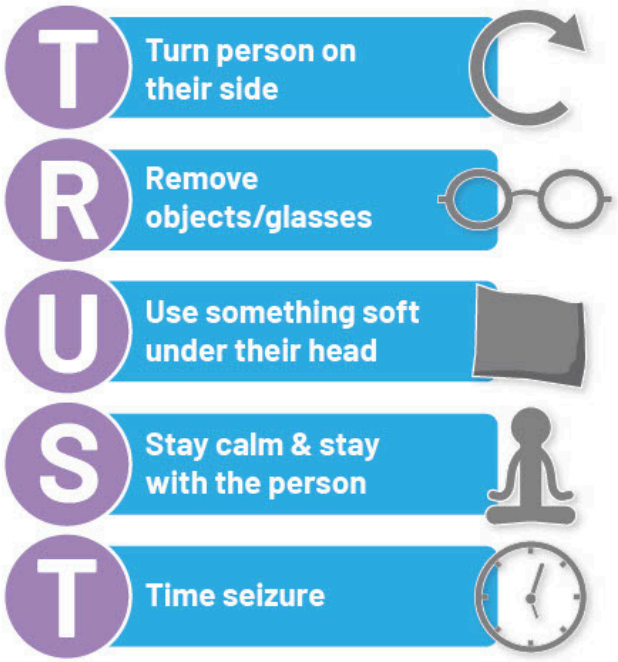
Types of Seizures

Seizures can take many different forms, not just the convulsive type most people associate with epilepsy. Common types of seizures include:

- **Generalized Onset - Tonic-Clonic** (Grand Mal): Convulsions, rigid muscles, jerking; lasts 1 to 3 minutes, followed by confusion.
- **Generalized Onset - Absence** (Petit Mal): Blank stare lasting a few seconds, sometimes with blinking or chewing motions.
- **Focal Onset - Impaired Awareness** (Complex Partial): Staring, dazed facial expression, repetitive random movements, impaired awareness, lasts 1 to 2 minutes, followed by confusion.
- **Focal Onset - Aware** (Simple Partial): Jerking in parts of the body or sensory changes, with full awareness.
- **Atonic** (Drop Attacks): Sudden collapse, recovery within a minute.
- **Myoclonic**: Sudden, brief, massive jerks in parts or all of the body.

SEIZURE FIRST AID

(For Generalized Tonic-Clonic)



REMEMBER

Never put anything in anyone's mouth or hold a person down when they are having a seizure!

CALL 911 IF:

- It is a first time seizure
- It is a new type of seizure for the person
- Seizure lasts more than 5 minutes
- Seizures happen back to back
- Seizure happens along with another injury
- Seizure happens in water
- Person has diabetes or is pregnant

epilepsy ALLIANCE LOUISIANA

We're Here to Help!

Whether you or someone you know is living with epilepsy or experiencing seizures, we're ready to provide the support, resources, and guidance you need. Reach out today to discover how we can assist you on this journey.

Our Mission

Epilepsy Alliance Louisiana is dedicated to supporting those impacted by epilepsy in local communities by confronting the spectrum of challenges created by seizures.

Our Vision

To create a world where epilepsy does not inhibit people from reaching their full potential.

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