



SEIZURE RECOGNITION & FIRST AID CERTIFICATION

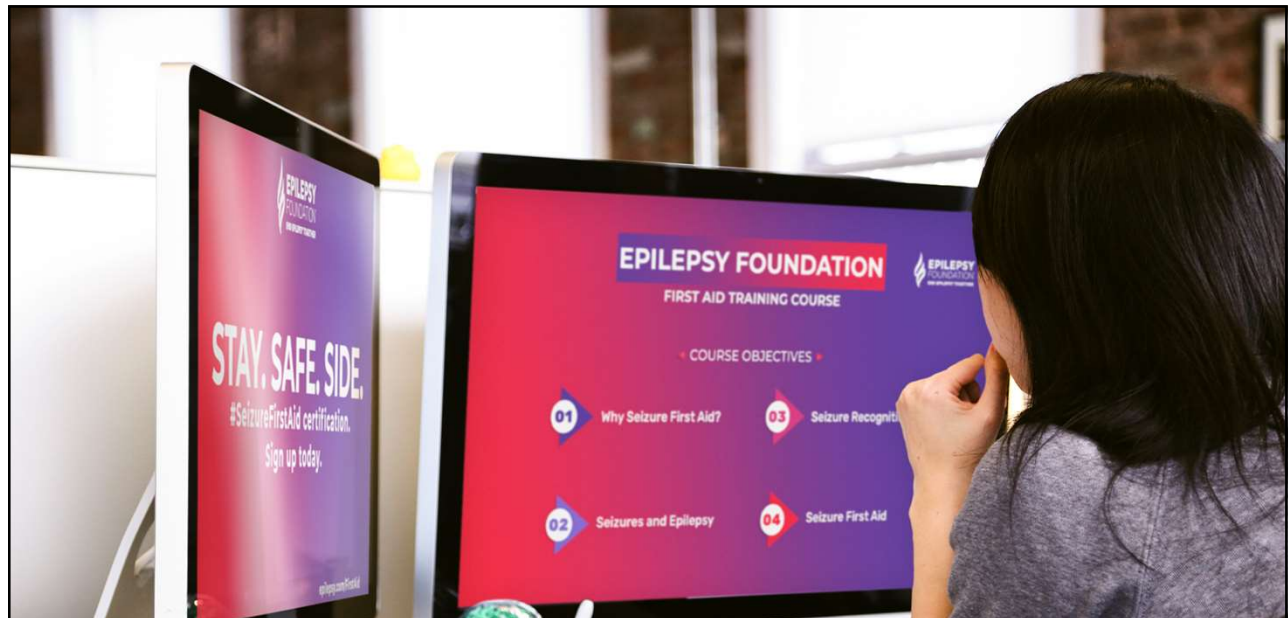
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Purpose of the Epilepsy Foundation

Everyone can learn how to help someone having a seizure.

Anyone with a brain can have a seizure.

Anyone with a brain can help.



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Disclosure

This program is made possible with funding from the Centers for Disease Control and Prevention (CDC) under cooperative grant agreement number 1 NU58DP006256-04-00.

Its contents are solely the responsibility of the authors and do not necessarily represent the views of the CDC.

Instructors must divulge at the beginning of the course any vested interest in any product, instrument, device or materials that may be used in the learning event.



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#ShareMySeizure

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Course Objectives

1. Define seizures and epilepsy
2. Identify correct and incorrect steps for helping a person having a seizure
3. Identify when you should call emergency services in the event of a seizure
4. Increase your confidence that you can help a person during a seizure

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What We Will Cover Today

Why Seizure First Aid?



Seizures and Epilepsy



Seizure Recognition



Seizure First Aid



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Why Seizure First Aid?

Why Should I Know Seizure First Aid?

Anyone, anywhere can have a seizure.

1 in 10



people will have a seizure during their lifetime.

You can help.

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1

ACTIVITY:

DID YOU KNOW...

INSTRUCTIONS:

1. **Raise your hand** when you know a statement
2. **Keep your hand up** if you already know these facts about seizures
3. **Put your hand down** when you hear something that you do not know.

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1

DID YOU KNOW ...

EVERYONE
can learn
Seizure
First Aid

Most seizures are
NOT medical
emergencies

A person may NOT
be aware they are
having a seizure

Seizures
are NOT contagious

A person can NOT
swallow their
tongue during a
seizure

Epilepsy IS
a medical disease

A person
CAN die
from a seizure

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Risks Related to Seizures

- Physical injury
- Difficulty breathing
- Drowning
- Prolonged Seizure Activity
- Seizure emergencies
- Early death
 - Accidents or drowning
 - Breathing or heart problems



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Risks Related to Epilepsy

- Sudden Unexpected Death in Epilepsy (SUDEP)
- Suicide



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Review and Reflect

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Knowledge Checks

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1

Knowledge Check

Anyone with a brain can have a seizure.

(True or False?)

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1 Knowledge Check

**Which of the following statements
are not true?**

1. A person is always aware they are having a seizure
2. Seizures are contagious
3. A person cannot swallow their tongue during a seizure
4. A person cannot die from a seizure
5. Epilepsy is a medical disease

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Seizures and Epilepsy



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The Brain And Seizures

- A seizure occurs when there is a temporary change in the way the brain sends electrical signals
- When a seizure happens, there is a “short circuit” in the way messages are sent between brain cells
- Seizures can occur with other conditions



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What Is Epilepsy?

Epilepsy means that a person is at risk for **unprovoked recurrent seizures**.

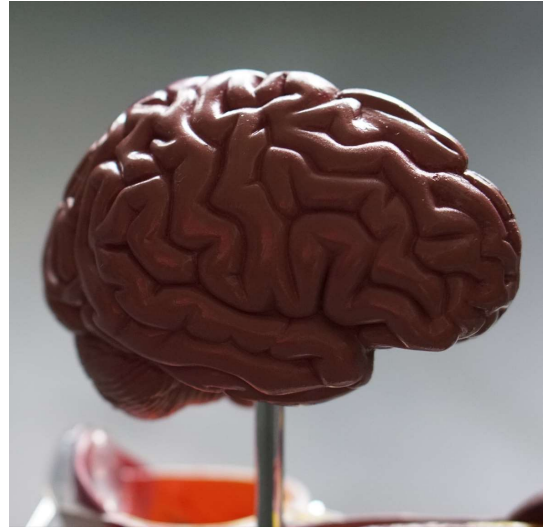
- There are many different “**types**” of epilepsies
- It does not indicate the **cause**
- It does not indicate a **prognosis**



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2 Common Causes of Seizures

- High temperature (fever or heatstroke)
- Brain injuries
 - Head trauma
 - Stroke
- Severe dehydration
- Brain disorders
 - Genetic syndromes
 - Neurodegenerative disorders
- Brain tumors
- Brain infections



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2 Seizure Triggers

Missed Medicines ⊕	Lack of Sleep ⊕	Stress ⊕
Alcohol & Recreational Drugs ⊕	Hormones ⊕	Sensitivity to Light ⊕
Other Illnesses ⊕	Nutritional Deficiencies ⊕	Over the Counter Medication ⊕

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What Do Seizures Look Like?

- Seizures are often portrayed in one way
- Seizures do present in different ways
- Symptoms are individual



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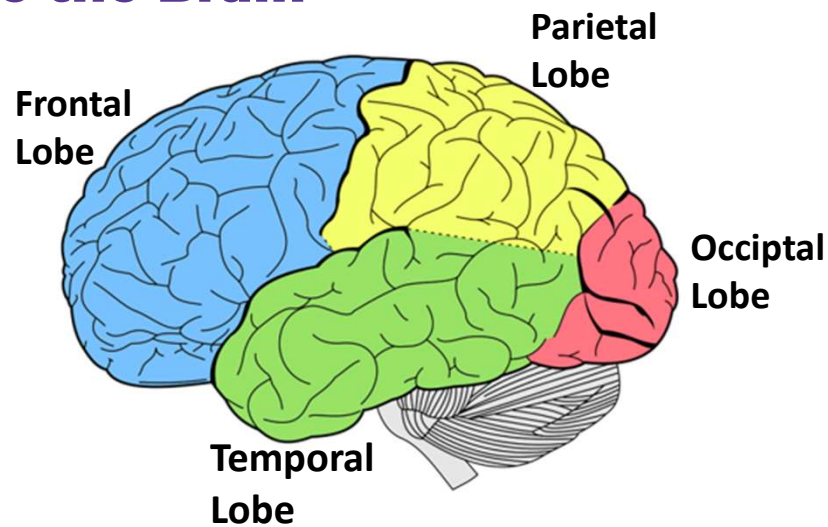
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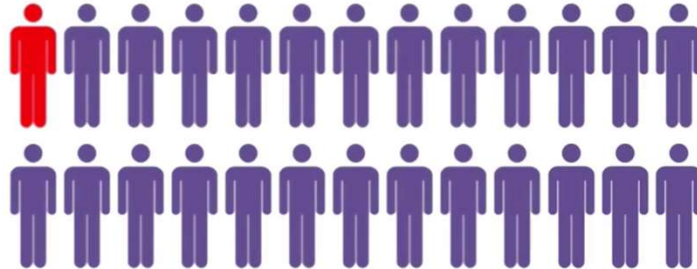
Explore the Brain



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Rate of Epilepsy

1 in 26



**people in the United States
will be diagnosed with epilepsy
during their lifetime.**

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Who Has Epilepsy?

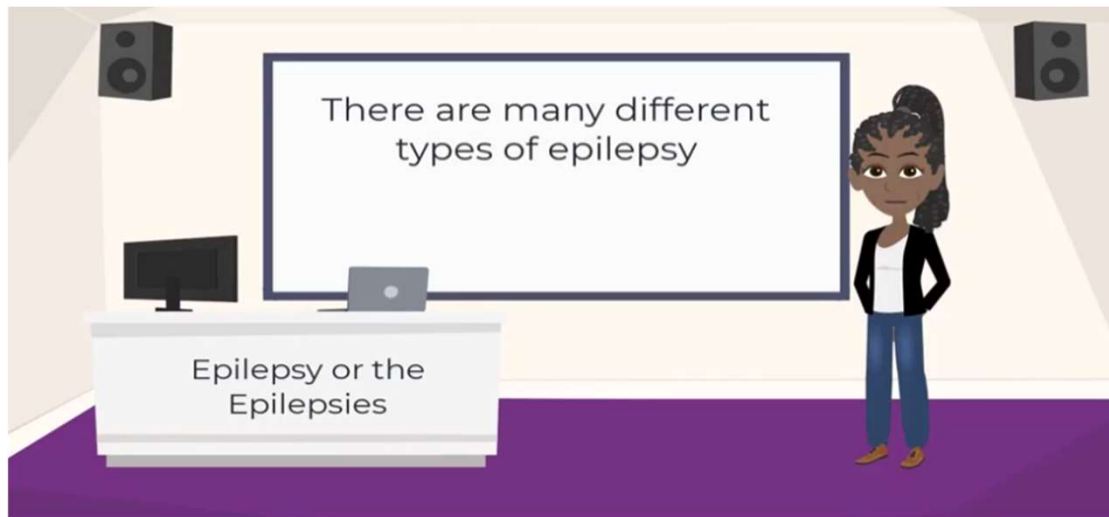
- 65 million people worldwide
- 3.4 million people in the United States
- 470,000 children and youth in the United States
- 1 million older adults (age 55+) in the United States



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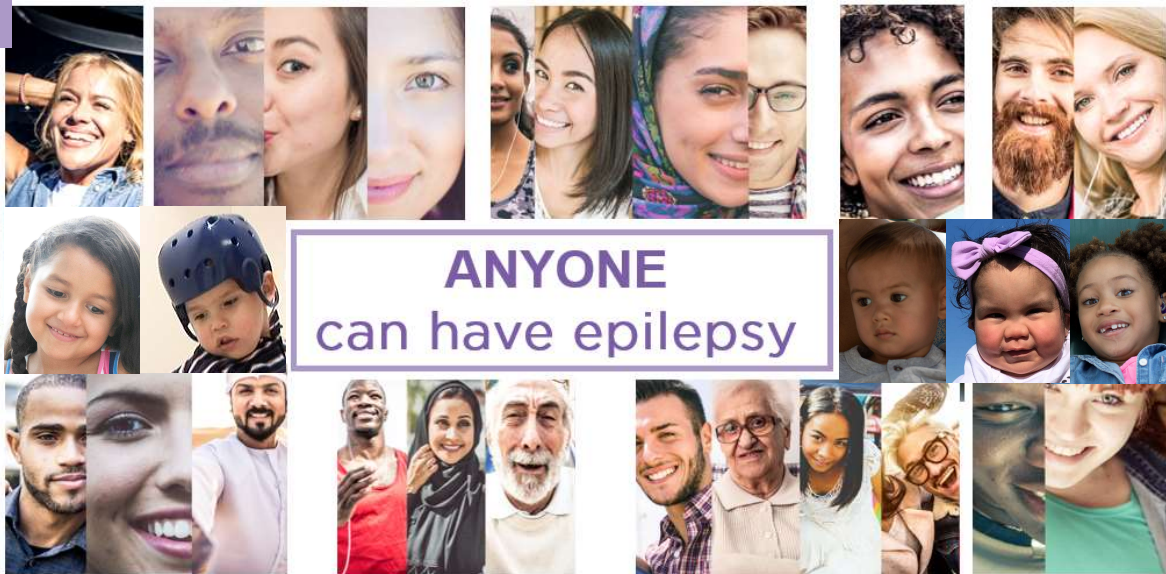
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Epilepsy or the Epilepsies



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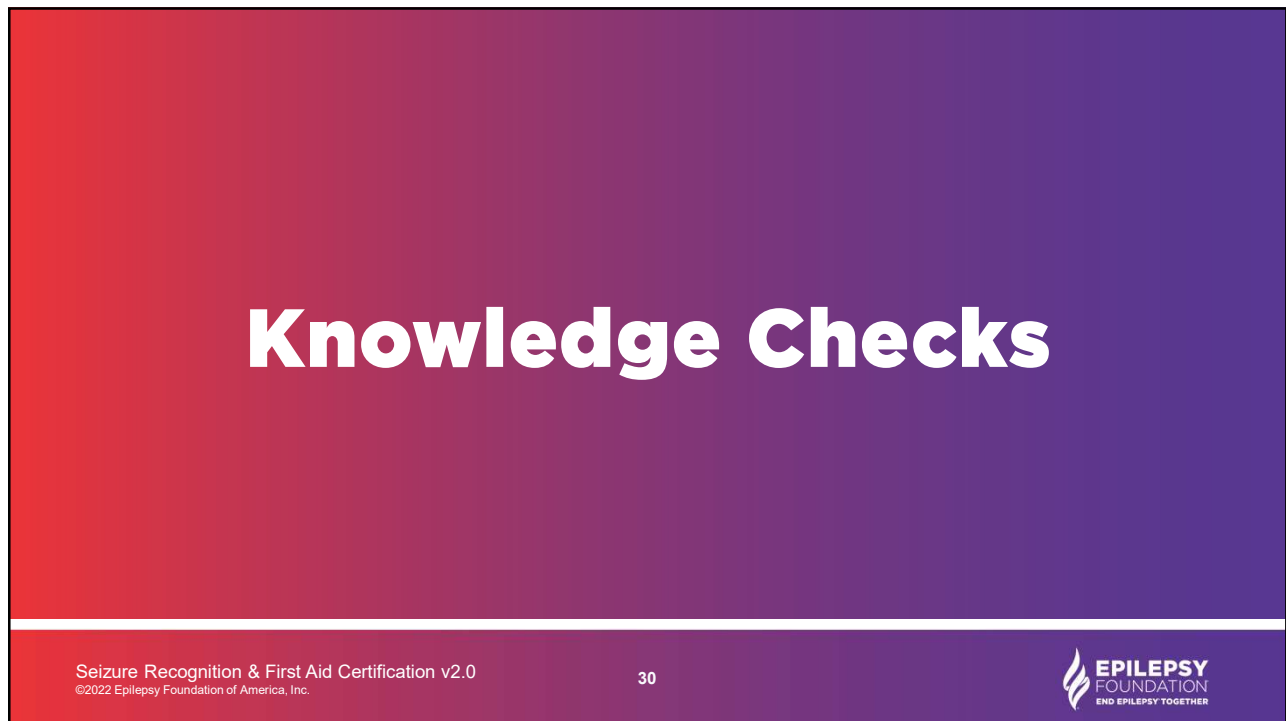
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Knowledge Check

In the U.S. about ____ million people have active epilepsy.

- ☐ 1.3
- ☐ 3.4
- ☐ 7
- ☐ 11.2

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Knowledge Check

What are some seizure triggers?

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Knowledge Check

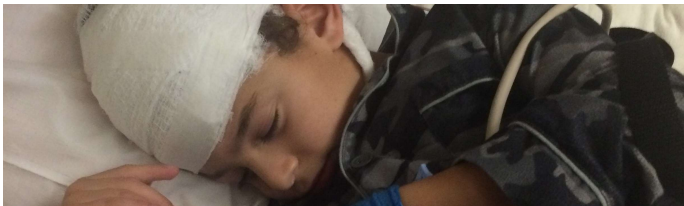
Epilepsy means that a person is at risk for
 _____ **seizures.**

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Seizure Recognition

Anything the brain can do normally,
 the brain can do during a seizure.



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3 Seizure Types

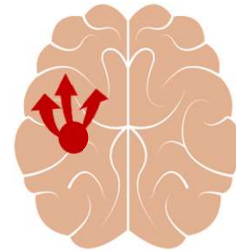
The brain is divided into two hemispheres

- **Focal** onset seizures: begin in one hemisphere
- **Generalized** seizures: begin in both hemispheres
- **Unknown** seizures: not sure where it begins

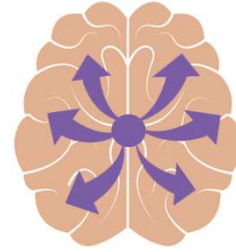
Determine if **AWARENESS** is affected



Look for other **SYMPTOMS**



FOCAL



GENERALIZED

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3 Recognizing Seizures



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Recognizing Seizures



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What To Look For During A Seizure

- What did you see or hear first ?
- Was person able to tell you if they didn't feel well?



EARLY SIGNS

- What happened next?
- Was person awake, confused, not conscious?
- What part of face and body involved?
- Did you notice changes in speech or behavior?

DURING SEIZURE

- How long did seizure last?
- Did person quickly return to usual?
- Was person tired, confused, describe other symptoms?



AFTER SEIZURE

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Seizure With No Change In Awareness

Focal Aware Seizure

- Fully awake and aware
- Any change in behavior:
 - **Motor:** rhythmic twitching, or jerking (face, extremities)
 - **Sensory:** tingling, sounds, smells, visual changes
 - **Psychic:** change in thinking, feeling, perceptions (fear, anxiety, déjà vu)


LENGTH:
1 to 3 minutes

May be confused with:
 Psychosomatic illness
 Mystical experience
 Illicit drug use

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Seizure With Confusion or Not Aware

Focal Impaired Awareness Seizure

- Not aware or confused
- May have blank dazed stare
- AUTOMATISMS (repeated purposeless movements)
- Clumsy movements
- May not be able to talk
- Often followed by tired, headache, nausea
- May become combative if restrained


LENGTH:
1 to 3 minutes

May be confused with:
 Substance abuse
 (alcohol, illicit drugs)
 Aggressive behavior
 Mental health problems

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Focal Impaired Awareness Seizure



Courtesy of Epilepsy
Foundation
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Seizure With Staring And Not Aware

Generalized Absence Seizure

- Generalized seizure
- Affects both sides of the brain
- Presents with a pause or blank stare and brief lapse in awareness
- Person is absent for a moment
- May blink or chew
- May happen once or twice a day or up to fifty or one hundred times
- Person may appear confused or daydreaming



LENGTH:
less than 20 seconds

Often confused with:
Daydreaming
Attention problems

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Generalized Absence Seizure



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Seizure With Loss of Consciousness

Tonic Clonic Seizure

- A sudden, hoarse cry
- Loss of consciousness
- A fall
- Stiff body, arms, and legs [tonic] then rhythmic jerking [clonic]
- Shallow breathing, drooling may occur
- Possible loss of bowel or bladder control
- Lips and skin may look grey or blue
- Often followed by confusion, headache, fatigue, sore muscles, and difficulty with speech



LENGTH:
Typically between
1 and 3 minutes

Often followed by
confusion, headache,
tired, sore, tongue
bitten, speech difficulty

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3 Tonic Clonic Seizure



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3 Other Types of Generalized Seizures

Change in muscle tone or tension

- Loose or floppy, may fall like a rag doll – **atonic**
- Stiffness, may fall like a tree trunk - **tonic**

Twitching/jerking of muscles

- Brief jerks in muscle or group of muscles (**myoclonic**)
- Rhythmic jerking in part or all of body (**clonic**)



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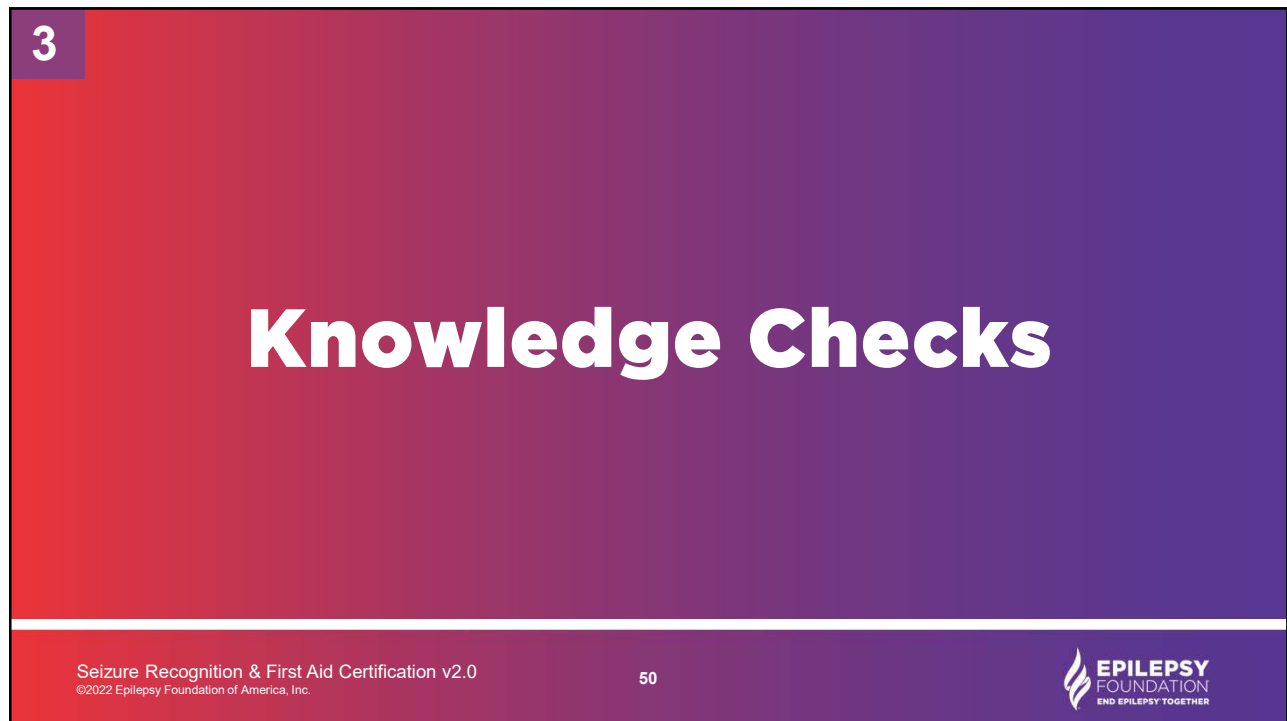
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3 Knowledge Check

Can you identify the behaviors on the list that are typically associated with a focal impaired awareness seizure?

Hint: **Seizure With Confusion or Not Aware**

- Staring facial expression
- Body is stiff
- Repeated movements such as lip smacking, chewing movements, or fiddling with hands
- Person is aware of what is going on
- Confused or not aware of what happens during all or part of the seizure

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3 Knowledge Check

Can you identify the behaviors on the list that are typically associated with a generalized absence seizure?

Hint: **Seizure With Staring And Not Aware**

- Usually lasts less than 20 seconds
- Usually falls to the ground
- Brief lapse of awareness
- Loss of consciousness for at least 1-2 minutes
- Pause in activity with stare
- Stares blankly

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3 Knowledge Check

Can you identify the behaviors on the list that are typically associated with a focal aware seizure?

Hint: **Seizure With No Change In Awareness**

- Person is not conscious
- Person stares for a few seconds
- Shallow breathing and drooling may occur
- Person is awake and aware
- Person may fall
- Sudden change in behavior, movements, feelings, etc.

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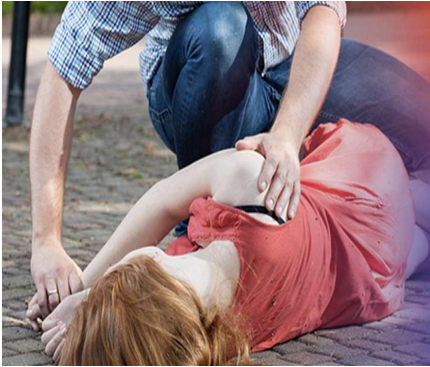
Seizure First Aid



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The 3 Basic Principles of Seizure First Aid



STAY

SAFE

SIDE



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Seizure First Aid: How to help someone having a seizure

1

STAY with the person until they are awake and alert after the seizure.

- ✓Time the seizure
- ✓Remain **calm**
- ✓Check for **medical ID**



2

Keep the person **SAFE**.

- ✓Move or guide away from **harm**



3

Turn the person onto their **SIDE** if they are not awake and aware.

- ✓Keep **airway clear**
- ✓Loosen **tight clothes** around neck
- ✓Put **something small and soft** under the head



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Seizure First Aid Card / Poster

How to help someone having a seizure

Seizure First Aid

How to help someone having a seizure

- 1 STAY** with the person until they are awake and alert after the seizure.
✓ Time the seizure ✓ Remain calm
✓ Check for medical ID
- 2** Keep the person **SAFE**.
✓ Move or guide away from harm
- 3** Turn the person onto their **SIDE** if they are not awake and aware.
✓ Keep **airway clear**
✓ Loosen **tight clothes** around neck
✓ Put **something small and soft** under the head

Call 911 if...

- Seizure lasts longer than 5 minutes
- Person does not return to their usual state
- Person is injured, pregnant, or sick
- Repeated seizures
- First time seizure
- Difficulty breathing
- Seizure occurs in water

Do NOT

- Do **NOT** restrain.
- Do **NOT** put any objects in their mouth.
- Rescue medicines can be given if prescribed by a health care professional

Learn more: epilepsy.com/firstaid



This publication was created by the Epilepsy Foundation, a nationally networked organization, and is part of our END EPILEPSY awareness campaign. This publication is made possible with funding from the Center for Disease Control and Prevention (CDC) under cooperative grant agreement number 5U49CE000264-04-001. We continue to affirm the responsibility of the Epilepsy Foundation and do not necessarily represent the views of the CDC. ©2022 Epilepsy Foundation of America, Inc.

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Seizure Action Plan

- Helps organize information to care for those known to have seizures
- Made under the guidance of a healthcare team
- Helps you know what to do to prevent an emergency

SEIZURE ACTION PLAN (SAP)

Name: _____ Birth Date: _____
Address: _____ Phone: _____
Emergency Contact/Relationship: _____ Phone: _____

Seizure Information

Seizure Type	How Long It Lasts	How Often	What Happens

How to respond to a seizure (check all that apply)

☐ First aid - Stay, Safe, Side. ☐ Notify emergency contact at _____
☐ Give rescue therapy according to SAP ☐ Call 911 for transport to _____
☐ Notify emergency contact ☐ Other _____

First aid for any seizure

☐ STAY calm, keep calm, begin timing seizure
☐ Keep me SAFE - remove harmful objects, don't restrain, protect head
☐ SIDE - turn on side if not awake, keep airway clear, don't put objects in mouth
☐ STAY until recovered from seizure
☐ Swap magnet for VHS
☐ Write down what happens
☐ Other _____

When to call 911

☐ Seizure with loss of consciousness longer than 5 minutes, not responding to rescue med if available
☐ Repeated seizures longer than 10 minutes, no recovery between them, not responding to rescue med if available
☐ Difficulty breathing after seizure
☐ Seizure injury occurs or suspected, seizure in water

When to call your provider first

☐ Change in seizure type, number or pattern
☐ Person does not return to usual behavior (e.g., confused for a long period)
☐ First time seizure that stops on its own
☐ Other medical problems or pregnancy need to be checked

When rescue therapy may be needed:

WHEN AND WHAT TO DO

If seizure (cluster, # or length) _____

Name of MedRx _____ How much to give (dose) _____

How to give _____

If seizure (cluster, # or length) _____

Name of MedRx _____ How much to give (dose) _____

How to give _____

If seizure (cluster, # or length) _____

Name of MedRx _____ How much to give (dose) _____

How to give _____

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Seizures are Unpredictable and Can Happen Anywhere

- Pay extra attention to safety
- Guide the person away from danger
- Don't restrain them unless absolutely necessary to prevent injury
- If they are about to fall or are unconscious lie them down, if possible
- Never leave the person alone
- Simple first aid may be all that is needed

Call for help if the person is alone and not recovering

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ANY SEIZURE Setting: Wheelchair



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4 Seizure With Loss of Consciousness Setting: In Water or When Swimming



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4 What NOT To Do

1

Do NOT restrain or
forcibly hold the person
down



2

Do NOT put any
objects in their mouth



3

Do NOT give water or food until
person is awake and able to
swallow



Follow Seizure Action Plan

Rescue Therapy may be used as prescribed by health care provider

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4 Seizure First Aid Demonstration



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4 Seizure First Aid Demonstration



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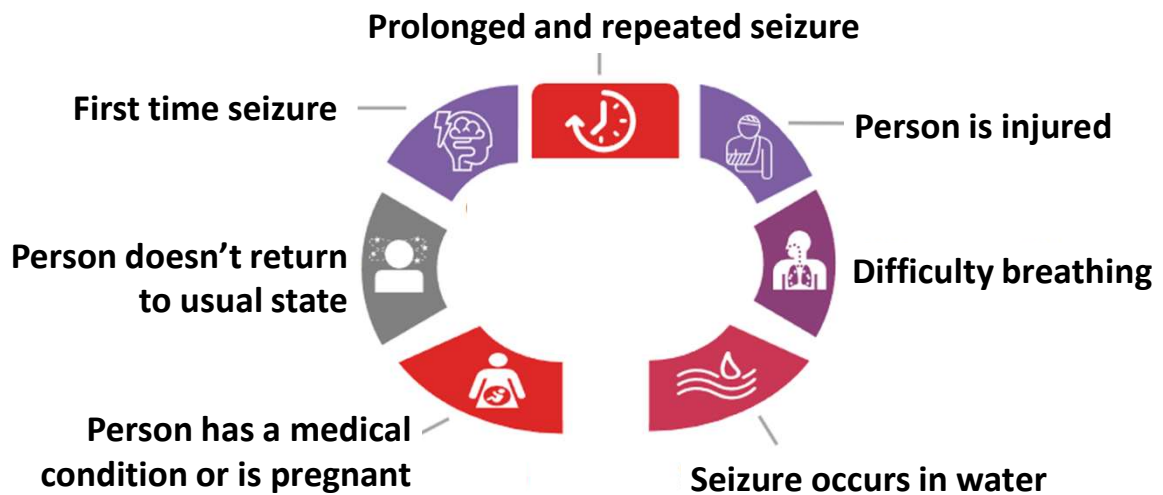
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When To Call For Emergency Help



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What To Expect After A Seizure

The Recovery (*postictal period)

- Refers to time immediately after a seizure, before a person returns to their usual state of awareness and function
- How a person feels and functions will vary depending of type of seizure experienced

How to help?

- Help person to a safe place to rest
- Check if they are alert and aware
- Stay with them until another adult arrives

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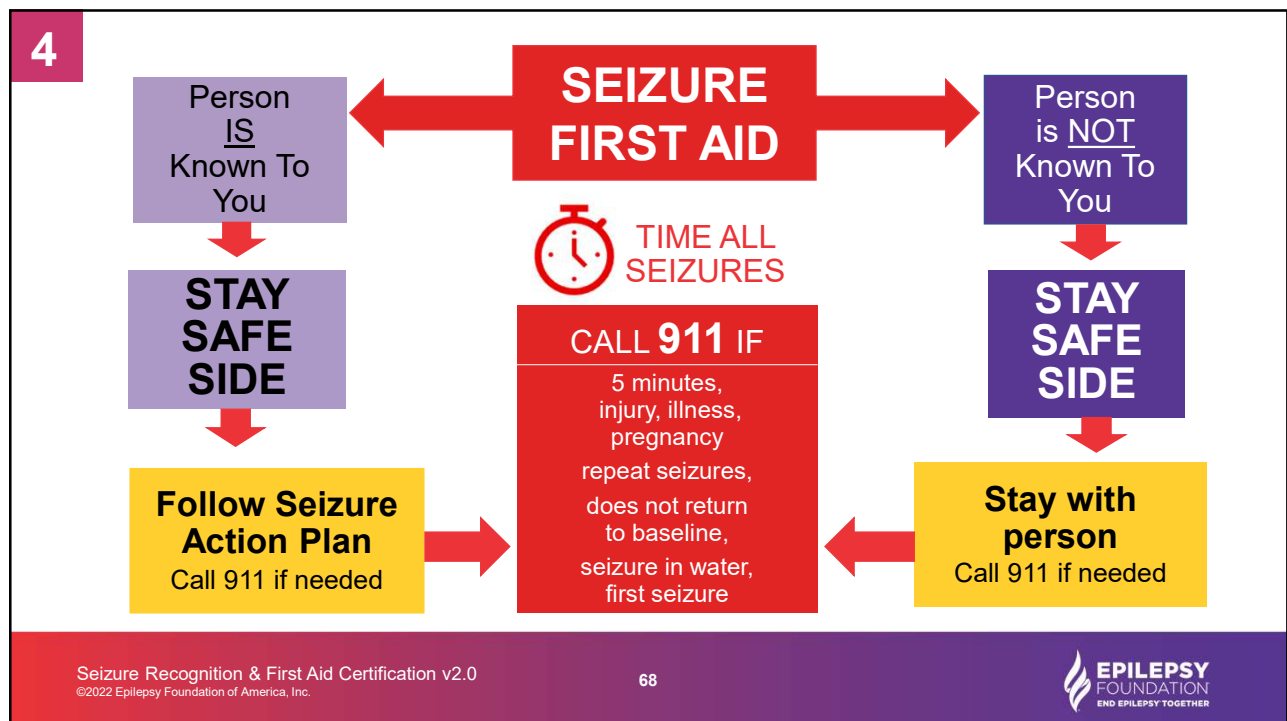
YOU CAN HELP

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EPILEPSY
FOUNDATION
END EPILEPSY TOGETHER

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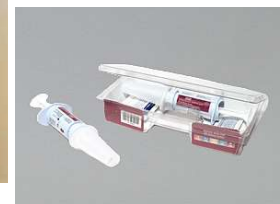


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When More Help Is Needed

- A person may have been prescribed a treatment to stop seizures that are too long or too frequent
- These treatments are called rescue therapies
- **Does NOT** take the place of usual seizure medicines or instead of emergency help.



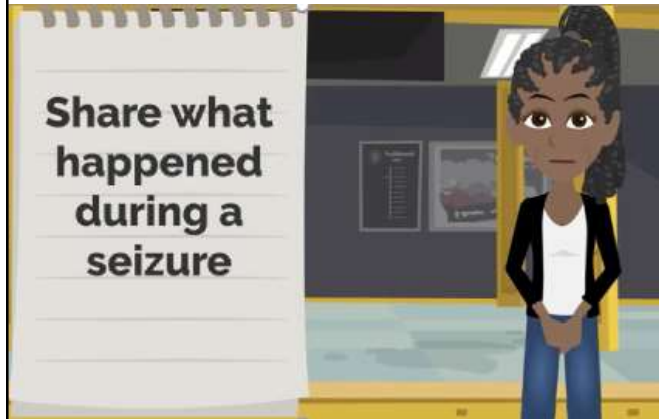
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What should I do
after the seizure
is over?

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4 Share What Happened During The Seizure



- How long did seizure last?
- What did you observe?
- Was the person injured?
- When, where seizure took place?
- Did person take any medicine?
- Was seizure different than usual?

Provide written notes if possible

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Knowledge Checks

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Seizure Scenarios

INSTRUCTIONS:

1. **Review** the seizure scenario
2. **Discuss** how you would apply seizure first aid (refer to first aid steps in slides or workbook)
3. **Discuss** the important things to look for during a seizure.
4. **Share** your seizure first aid response.

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You are in a grocery store parking lot...

As you are loading your car with grocery bags, you notice a young man nearby who looks “dazed”. It seems like he is not paying attention. He stares straight ahead and is fiddling with his hands. He starts to walk towards a busy street.

What should you do?

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A friend suddenly falls to the ground while riding on the train...

On train ride home from work, you are discussing weekend plans with your friend. Suddenly she drops to the ground unconscious and her body is jerking. Someone called out for help, others moved away

What should you do?

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You are on a school field trip with a group of third graders...

As you are entering the museum you notice one child looks “dazed” and stops walking for a few seconds. When you ask if she is okay she says yes, but you notice the same thing keeps happening. She continues to look distracted and has trouble following instructions ...

What should you do?

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A cousin has shared that he has seizures, but you have never seen one. No one in the family ever talks about it...

At a family party, your cousin sits down beside you and says he is feeling scared and asks if something is burning. He starts breathing fast and looking around. He is able to talk but appears anxious.

His brother walks over and says “Oh he’s fine, he has these spells once in a while. He’ll get over it.”

He’s not feeling better after a few minutes, and it seems he is more nervous and confused as time passes...

What should you do?

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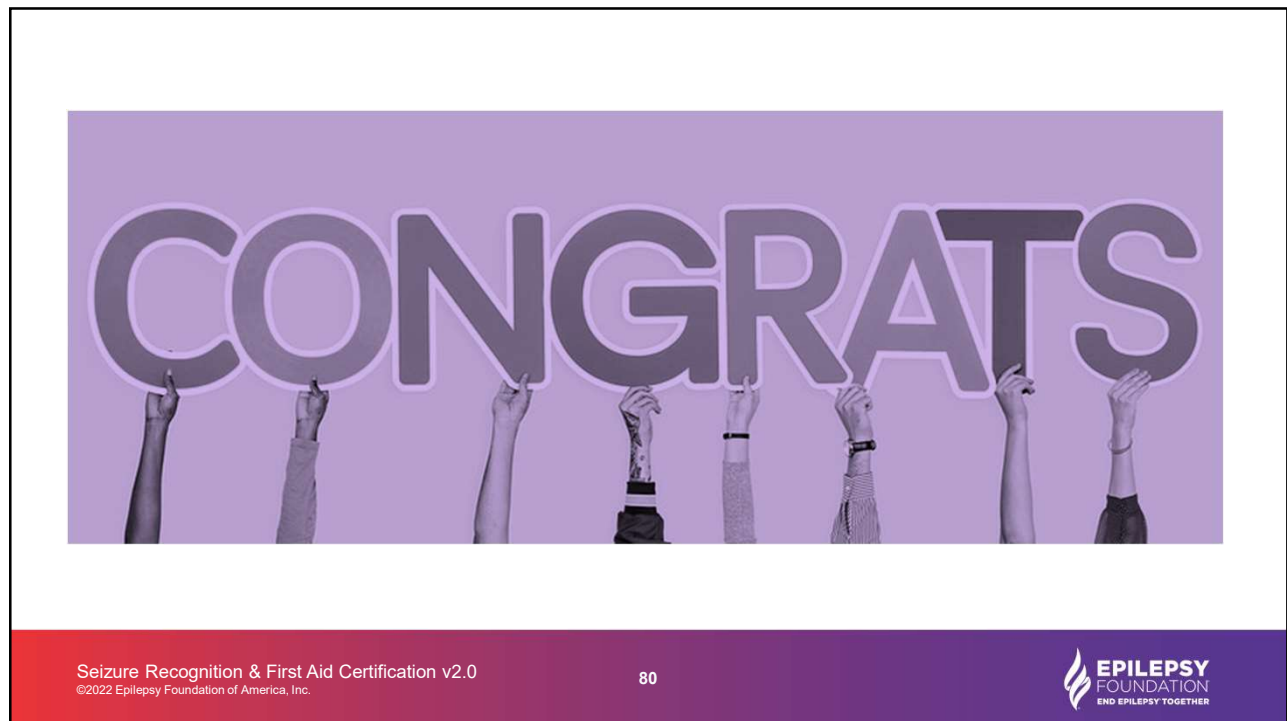
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Seizure Recognition and First Aid Certification Procedures

1. Complete the post-assessments on the new **Epilepsy Learning Portal**
INSERT LINK
 - Write down the link or copy and paste from the chat box
 - Zoom will send you an automated e-mail tomorrow with the link to access the post-assessments.
 - Do not share the link with others
2. Pass the knowledge questions on post-assessment (a score of at least 80% correctly answer 13 or more of 16 questions)

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EPILEPSY
FOUNDATION
END EPILEPSY TOGETHER

**CERTIFICATE
OF COMPLETION**

LaQueisa Haynes-Smith

has successfully completed requirements for

**Seizure Recognition and First Aid Certification
(Instructor-Led) - 2020**

Duration: 1hr

Laura Thrall
Laura Thrall, CEO & PRESIDENT
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Issued: 2021-10-04 Expires: 2023-10-04 Certificate ID: n5y312dsj

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Course: Seizure Recognition and First Aid Certification (Instructor-Led) - 2020 Certificate ID: n5y312dsj

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Thank You

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APPENDIX

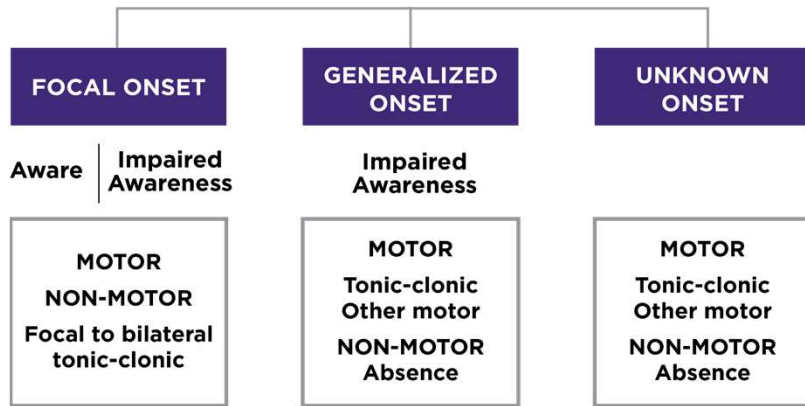
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“NEW” Classification of Seizure Types Basic Version¹



1. From International League Against Epilepsy, 2017
2. Definition, other seizure types and descriptors are listed in the accompanying paper and glossary of terms.
3. Due to inadequate information or inability to place in other categories