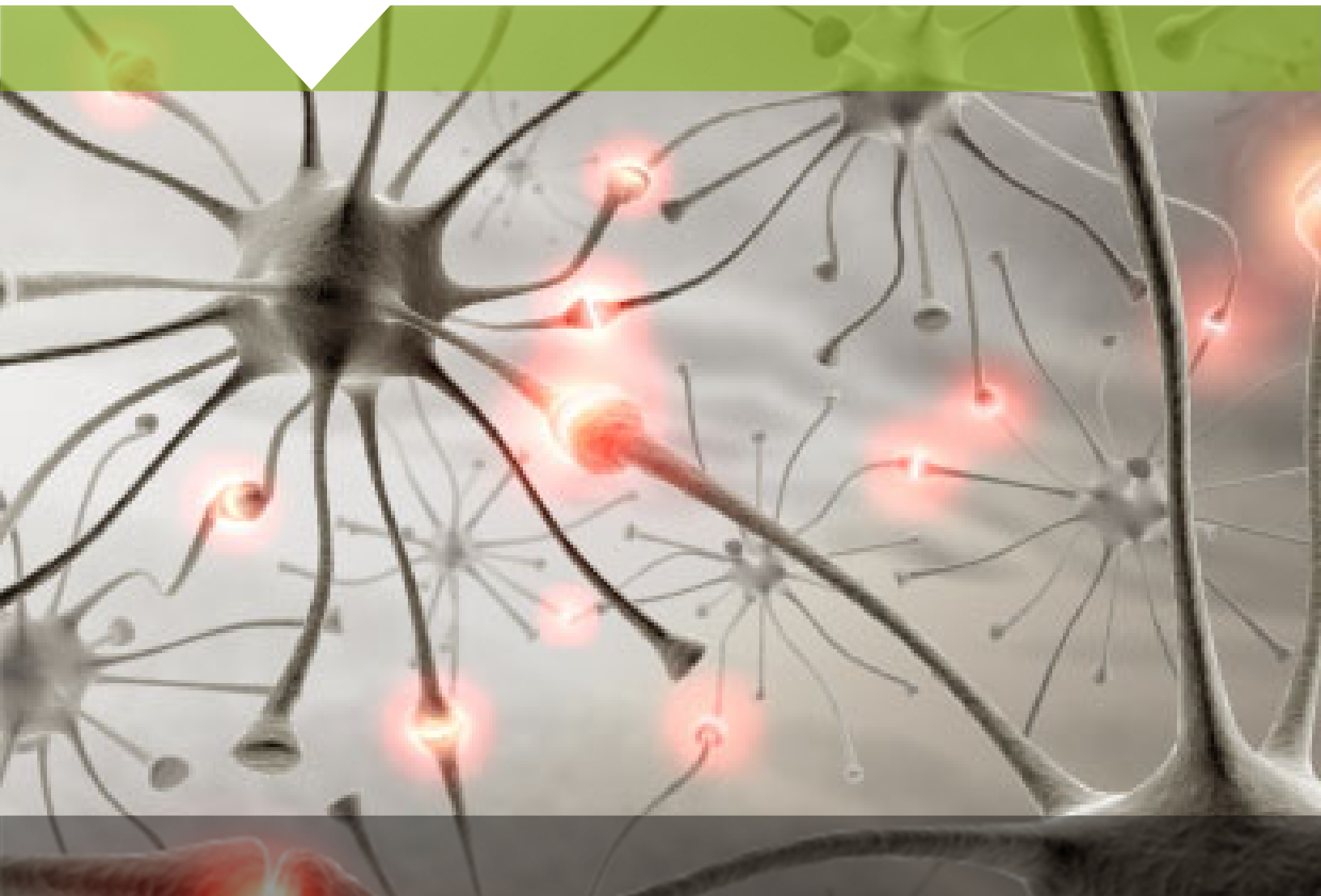


# A DISEASE PROCESS MODULE: UNDERSTANDING SEIZURES



...Developing top-notch caregivers, one inservice at a time.

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*A Disease Process Module:*  
**UNDERSTANDING SEIZURES**

We hope you enjoy this inservice, prepared by registered nurses especially for caregivers like you!

## Instructions for the Learner

*If you are studying the inservice on your own, please do the following:*

- Read through **all** the material. You may find it useful to have a highlighting marker nearby as you read. Highlight any information that is new to you or that you feel is especially important.
- If you have questions about anything you read, please ask your supervisor.
- Take the quiz. Think about each statement and pick the best answer.
- Check with your supervisor for the right answers. You need **8 correct** to pass!
- Print your name, write in the date, and then sign your name.
- Email In the Know at [feedback@knowingmore.com](mailto:feedback@knowingmore.com) with your comments and/or suggestions for improving this inservice.

**THANK YOU!**

### **After finishing this inservice, you will be able to:**

*Define seizure and describe how recurrent seizures lead to a diagnosis of epilepsy.*



*Explain what happens to the body during a seizure and describe what you will do when a seizure happens.*



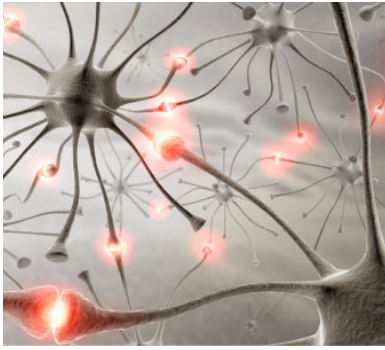
*Compare the symptoms of generalized seizures to symptoms of partial seizures.*



*Monitor clients on anti-seizure medication for compliance.*



*Demonstrate safety precautions for clients with seizure disorders.*



## Inside This Inservice:

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Expires 12/31/2022

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## A FIRE IN A FIRECRACKER FACTORY...

**You are caring for Helen, a 74-year-old woman who is recovering from a stroke she suffered about four months ago.**

Helen's recovery is going well. She is talking again and regaining strength.

One day, while you change her bedding, you hear a strange gasp. You turn to look at Helen.

She looks **frightened**. Her eyes are wide open but **not really focused** on anything. She begins to **repeat** the sound, "da-da-da-da," over and over.

You notice a small **twitch** in her thumb—and within seconds the twitch has moved to her hand, then her wrist—and then her whole arm is twitching. A second later, her neck is twitching, yanking her head down to her shoulder again and again.

Then, just as suddenly as it started . . . it ends.

Helen just had a post-stroke **seizure**. Now she is exhausted and confused. You call the nurse and help Helen get into bed where she will spend the next few hours sleeping.



- **In the year after a stroke, chances of seizure are about 20 percent.**
- **Most people who have post-stroke seizures will have just one. A small percentage will develop epilepsy (which is more than one seizure).**

Helen's seizure is just *one* type of seizure. There are many reasons a seizure may happen and many more ways it can affect a client.

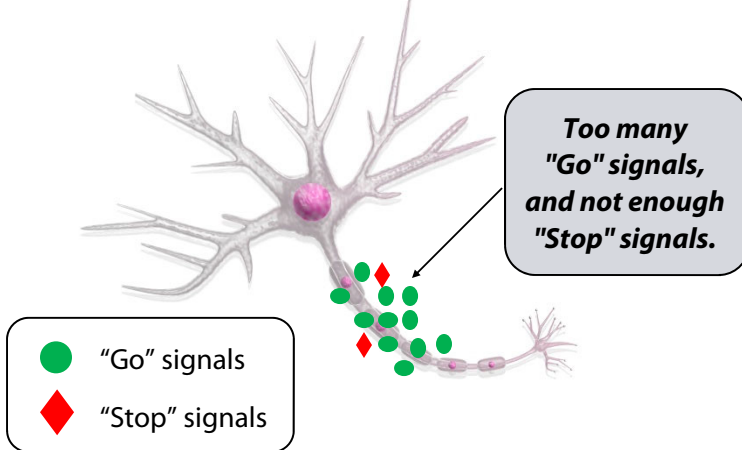
- **A seizure happens when a burst of electrical activity causes a chain reaction of cells in the brain to overreact.**

**It's like lighting a fire in a firecracker factory.** First, there's a small boom from the first firecracker. Then, a spark lights a nearby string of firecrackers and the explosions get louder. Finally, a wave of activity races through the entire factory until all the firecrackers have exploded.

**Keep reading to learn all you can about seizures and epilepsy. Find out how you can prevent the triggers that cause seizures and be prepared to keep your clients safe.**

# WHAT'S REALLY HAPPENING?

## A SINGLE NEURON



***In a normal brain, there are chemicals called neurotransmitters that act as messengers to control what the neurons (nerve cells in the brain) do.***

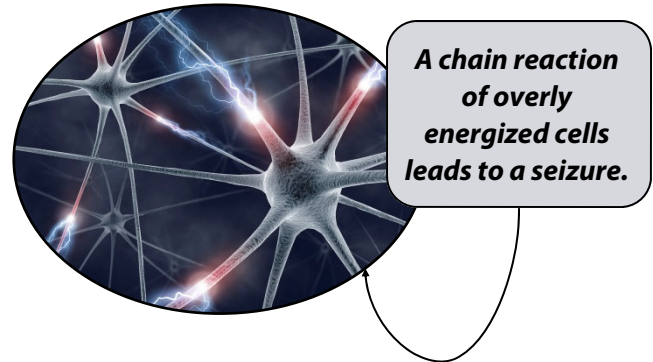
- Some neurotransmitters work like "green lights." They are the **"Go" signals**.
- Others work like "red lights." They are the **"Stop" signals**.

When these "stop" and "go" signals stay in balance, everything works normally.

***When there are too many "go" signals, and not enough "stop" signals, a burst of energy is created in the cell.*** This "boosted" cell sends energy out to others cells in a chain reaction (like the firecracker factory). This group of overly-energized cells is what causes the seizure.

The *location* of the cells and the *number* of cells involved will determine how severe the seizure is and what symptoms the person will have.

## A GROUP OF NEURONS



***Many different types of problems with the brain can lead to the chemical imbalance that causes a seizure.***

- Some people are born with seizures.
- Others develop them after a head injury, brain tumor, or stroke.
- In addition, heart disease, fevers, alcoholism, and use of illegal drugs can lead to seizures.

Sadly, while most seizures are caused by some type of brain injury, the seizure itself can also cause injury to the brain. ***And, more injury can lead to more seizures.***

**Epilepsy** is usually diagnosed after a person has had at least two seizures that were not caused by some known condition like alcohol withdrawal or fever.

**NOTE:** *Everyone who has epilepsy has seizures—but not everyone who has seizures has epilepsy.*

# WHAT'S NEW?

Grab your favorite highlighter! As you read through this inservice, **highlight five things** you learn that you didn't know before. Share this new information with your supervisor and co-workers!



# TERMS AND STATS YOU NEED TO KNOW

## COMMON TERMS YOU SHOULD KNOW

- **Seizure.** A sudden discharge of electrical activity in the brain. It causes changes in behavior, consciousness or perception.
- **Aura.** A feeling or movement that serves as a “warning sign” that a seizure is beginning. It may include odd actions, visions, sounds, or sensations.
- **Neurologist.** A doctor who specializes in disorders of the brain and the nervous system.
- **Partial Seizure.** A seizure that involves only *one* part of the brain.
- **Generalized Seizure.** A seizure that involves the *entire* brain.
- **Absence Seizure.** A brief seizure (lasting less than 20 seconds) that may include staring, blinking and automatic gestures. This is also known as a “petit mal” seizure.
- **Tonic-Clonic Seizure.** A seizure that involves stiffening of the body and muscle jerks. This is also known as a “grand mal” seizure.
- **Status Epilepticus.** A seizure or series of seizures that last longer than five minutes. This can be a life-threatening condition—and it requires immediate medical attention!

## THE CHANGING FACE OF SEIZURES AND EPILEPSY

- The percentage of individuals with seizures and epilepsy has **decreased in children** and **increased in the elderly**.
- Currently, more than 300,000 Americans over the age of 65 have epilepsy.
- By 75 years of age, ten percent of the population will have experienced some type of seizure and three percent will be diagnosed with epilepsy.
- About 300,000 people will have their *first* seizure this year.
- Around 200,000 people are diagnosed with epilepsy each year.
- Males are slightly more likely to develop epilepsy than females.



### LOOK HOW FAR WE'VE COME!

In ancient times, it was believed that during a seizure, a person was being punished by the gods or demons.

Early treatments for seizures were meant to drive away any evil spirits. These treatments included:

- Drinking the warm blood of a gladiator.
- Having a priest perform an exorcism.

Sometimes, people with seizures were burned at the stake.

In 400 B.C., the physician, Hippocrates, suggested that epilepsy was a brain disorder. He was right!

In the 1800s, most doctors still believed that epilepsy was a form of insanity. Many people with epilepsy were kept in mental institutions.

The first medicine that helped fight seizures was developed by an English physician in 1857.

By the early 1900s, two more medications—Phenobarbital and Dilantin—were discovered. These drugs are still being used to treat seizures today.

During the last century, neurologists—*not psychiatrists*—began to treat people with seizures.



# TYPES OF SEIZURES

**GENERALIZED SEIZURES:** There are *three* main types of generalized seizures. Each of these types affect the *whole* body, but in different ways. Keep reading to learn more about each type of generalized seizure:

- **“Grand Mal” or tonic-clonic:** Symptoms of this type of seizure include unconsciousness, convulsions, and muscle tightening. These seizures tend to last a couple of minutes and may cause a client to enter a “deep sleep” when it’s over. Grand Mal seizures are the most frightening to witness.
- **Absence:** These seizures cause a very brief loss of consciousness, usually only a couple of seconds. People having an absence seizure stop what they are doing and get a blank look on their face. They may blink a few times, smack their lips, or pick at their clothes. After five to ten seconds, they go back to what they were doing as if nothing has happened.
- **Myoclonic:** Symptoms include jerky, sporadic movements—usually on *both* sides of the body.



**PARTIAL SEIZURES:** Partial seizures start in *one particular part* of the brain. There are two types, with complex partial seizures being the most common seizure for people over the age of 60.

- **Simple partial seizures:** During these seizures, a client will remain *awake* and aware of what’s happening. These seizures last up to 90 seconds. The client may make sudden jerking motions and may have abnormal sensations.
- **Complex partial seizures:** These seizures last from one to two minutes and usually cause the person to seem “out of it” or “dazed”—and unaware of what is happening. Other symptoms may include lip-smacking, fidgeting, and/or picking at their clothes. A client having this type of seizure may try to wander.

Sometimes, a partial seizure spreads quickly to other parts of the brain, turning into a generalized seizure. If this happens, you will see symptoms of a Grand Mal seizure.



## CHALLENGE YOUR BELIEFS!

No other medical issue has as much myth and superstition surrounding it as epilepsy and seizures have.

Read the following statements about seizures and decide if you think they are myths or facts.

### MYTH FACT

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | People with epilepsy are mentally challenged.                                 |
| <input type="checkbox"/> | <input type="checkbox"/> | Epilepsy is contagious.   |
| <input type="checkbox"/> | <input type="checkbox"/> | People with epilepsy should not have children.                                |
| <input type="checkbox"/> | <input type="checkbox"/> | People with seizures or epilepsy have a mental illness.                       |
| <input type="checkbox"/> | <input type="checkbox"/> | You should restrain someone during a seizure.                                 |
| <input type="checkbox"/> | <input type="checkbox"/> | You should place a spoon or a washcloth in a person’s mouth during a seizure. |
| <input type="checkbox"/> | <input type="checkbox"/> | You can swallow your tongue during a seizure.                                 |

**Answers: All of these statements are MYTHS!**

# WHAT HAPPENS DURING A SEIZURE?

While there are *many* variations, most seizures follow a similar course. For example, a seizure might go something like this:

## 1. There's a **TRIGGER**

Something *triggers* abnormal activity in the brain. This might be anything from a stroke to a change in the body's hormone levels.

## 2. Then Comes an **AURA**

Many people experience an *aura* shortly before a seizure begins—although it is less common in elderly people. This warning sign could be something like a ringing sound, a specific smell, or a vision problem. Some people learn to lie down or take other safety precautions when they experience an aura.

## 3. The **SEIZURE** Starts

At this point, the actual seizure activity begins. This may be barely noticeable—such as the twitching of a facial muscle. Or, it may include full body convulsions.

## 4. Followed By the **POSTICTAL** Phase

After the seizure has ended, most people need some time for the body to return to normal. This is known as the *postictal* phase. It may be short—or it may last several hours.

## 5. Or By **REENTRY**

Unfortunately, some people *don't* return to normal after the initial seizure. Instead, the seizure activity starts all over again.

## MORE ABOUT TRIGGERS . . .

Keep in mind that a number of things can trigger a seizure, including:

- Lack of sleep
- Drinking alcohol
- Stress
- Hormone changes
- Smoking cigarettes
- Skipping a medication dose
- Taking over-the-counter medicines such as Benadryl
- Bathing in hot water
- Certain foods

If a client has been diagnosed with a seizure disorder, try to watch for clues about what might trigger his or her seizures. Then, help your client *avoid* those triggers!



# TALK about it!

## Open the Discussion

### WITNESSING A SEIZURE

During your career you may have cared for a client or two who suffered from seizures or epilepsy. If not, you may in the future.

Even the most educated and prepared medical professional may feel a little fear or anxiety about caring for clients with seizures.

#### **Why are seizures so frightening?**

- It has to do with not being able to *control* the situation or to guess what will happen next.
- You may also worry about the client's safety and wonder if you will be able to protect him or her from injury.
- The uncertainty that surrounds seizures is unsettling for everyone.

#### **The best way to calm your fears and be as prepared as possible is to talk about it.**

- If you have experience with seizures, share what you know with your co-workers.
- If you have never witnessed a seizure, ask your co-workers and supervisor how they handle these situations.

# SEIZURES IN SENIORS

## ***Would it surprise you to learn that many people have their first seizure after age 65?***

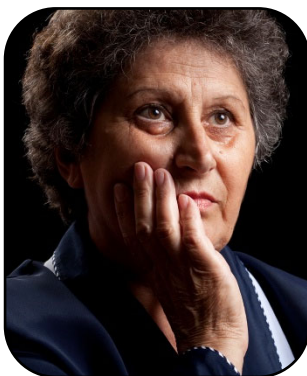
Every year, there are 60,000 new cases of epilepsy diagnosed among senior citizens.

Anything that disturbs the normal pattern of brain activity can lead to seizures—and, sometimes, epilepsy. For elderly people, this includes:

- Stroke
- Dementia, such as Alzheimer's disease
- Brain tumors
- Head injury (often due to falls)
- Liver disease
- Heart disease
- Alcoholism
- Uncontrolled diabetes
- Infections
- Reactions to prescription drugs
- Kidney disease

## **HOW ARE SEIZURES DIFFERENT FOR SENIORS?**

- Diagnosing epilepsy in an older person can be difficult since some of the signs (confusion, "blackouts," and memory lapses) might be overlooked as a "normal" part of aging.
- The postictal phase (the period just after the seizure) can last much longer for an older person. It can last more than 24 hours or as long as one week.
- Seizures can lead to falls, which can be disabling or even deadly for seniors.
- Having seizures can lead to depression which can be difficult to treat in the elderly.
- Older people may be afraid of seizures because they remember a time when people with seizures were considered insane and could not be helped.



# THINK about it!

## **WHY ARE SENIORS HAVING MORE SEIZURES?**

In the past, epilepsy was often considered a problem of childhood. But today, the rate of newly diagnosed epilepsy is actually higher in elderly people.

### ***Why are seniors now the largest group of people with epilepsy?***

Today, people **live longer**, but have **more health problems**. These health problems and their treatments are now contributing to the rise in seizures and epilepsy among seniors.

- About 1/3 of cases of epilepsy among seniors are caused by stroke.
- About 11 percent of cases are caused by Alzheimer's disease.
- Nearly two percent of the cases are caused by head injuries. Seniors have more falls—and falls can lead to head injuries.

### ***In addition, the elderly are more sensitive to changes such as:***

- Very high or very low blood sugar,
- Very low sodium levels, and
- Endocrine disorders (like diabetes or thyroid disorders).



# HOW ARE SEIZURES TREATED?

**MEDICATIONS:** There are more than two dozen different anti-seizure medications. Some people must take more than one kind at a time to control their seizures. For treatment to be successful, it's important to keep a steady level of medication in the blood. ***This means taking each dose of medication on schedule!***

## THE SIDE EFFECTS OF SEIZURE MEDICATIONS

There are many possible side effects to anti-seizure medications, including:

- Drowsiness
- Confusion
- Fatigue
- Clumsiness
- Double or blurred vision
- Nausea and/or vomiting
- Increased bone loss which may lead to osteoporosis
- Dizziness
- Constipation
- Problems with concentration
- Temporary hair loss
- Weight loss or gain
- Swelling in the hands, legs and feet
- Loss of appetite

Most of the time, the side effects for anti-seizure medications are mild and go away within a few weeks. If your client is bothered by the side effects, the physician may be able to adjust the amount and timing of each dose.

***Some side effects are not as common and need to be reported to your supervisor right away. These include:***

- Blood in the urine or stool, dark-colored urine, or painful or difficult urination
- Joint, muscle, or bone pain
- Pain and/or swelling or bluish color in the leg or foot
- Red, blue, or purple spots on the skin
- Sores, ulcers, or white spots on the lips
- Easy bruising
- Fever
- Bleeding, tender, or enlarged gums
- Fast or irregular heartbeat



# THE NEXT STEP!

*Apply what you've learned!*

### MEDICATION COMPLIANCE

It's very important for people with seizures or epilepsy to take their medications on time, every day, as ordered.

People who quit taking their anti-seizure medication or skip doses suddenly put themselves at risk for *status epilepticus*.

Studies have shown that many elderly people fail to take their anti-seizure medications because of side effects.

***Look at the side effects listed on this page and describe what you will do if you notice any of these in your client.***

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***Some clients may have trouble remembering to take seizure meds on schedule. Think of three creative solutions you might try to help clients remember to take their medications as ordered.***

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## WHEN A SEIZURE HAPPENS . . .

1. **If possible, help the person lie down on the floor or a flat surface and turn onto one side.** Loosen any clothing around the person's neck. Cushion the head with something soft.
2. **If the person having the seizure is seated, try to turn him gently to one side** (so any fluids drain out of the mouth).
3. **DON'T PUT ANYTHING IN THE PERSON'S MOUTH!** (Regardless of what you may have heard, it's impossible to swallow your tongue.)
4. **Make sure the person has plenty of room**—with no dangerous objects nearby that could cause injury. But, don't restrain the person. Restraining an unconscious person whose body is jerking could cause a broken bone.
5. **Restraining a conscious person who is confused or agitated will only makes things worse.** If the person is awake, wandering, and headed for danger, guide her away gently.
6. **Stay calm and remain with the client throughout the seizure.** People having seizures may lose control of their bowels or bladder. They may turn blue and blood may come from their mouths (if they bite their tongues). Seizures can *look* more serious than they are.
7. **Watch the clock.** If the seizure lasts longer than five minutes or a second seizure starts right after the first one, call for immediate help. Otherwise, after the seizure, help the person to a comfortable resting position, then report the incident to your supervisor and note the details in your documentation.

### WHEN IS A SEIZURE AN EMERGENCY?

Most seizures do not require a call to 911 or a trip to the hospital. However, in the following cases, emergency help is needed:

- This is a **first** seizure.
- The seizure lasts **longer than 5 minutes**. (This is known as *status epilepticus*.)
- Your client has **more than one seizure** without regaining consciousness.
- You client has **more seizures than normal** or there is a **change in the type** of seizure.
- An **injury** occurs (such as, head injury, wound, or broken bone).
- The seizure occurs in the **bathtub or swimming pool**.
- Normal **breathing** does not resume.



### *Thinking outside the box!*

*Working with clients in the home often requires coming up with creative solutions to uncommon problems.*

- **THE PROBLEM:** You are caring for a 71-year-old man who lives alone, but recently started having seizures. It has become clear that he can no longer live by himself.
- His daughter has a room in her home and would love to move him in, but she has fears about what it will be like to care for him with seizures. In addition, she has two children (ages 8 and 10), and she worries that the seizures will frighten them.
- **WHAT YOU KNOW:** You know that with some education and training, his daughter and her children can handle this situation.
- **GET CREATIVE:** Get together with a co-worker and role play a conversation with the daughter. Tell her everything you know about seizures. Reassure her that most people are a little fearful of seizures, but they often look more serious than they are.
- **TALK ABOUT IT:** Share your ideas with your supervisor and find out how he or she would solve the problem.

# SEIZURE SAFETY PRECAUTIONS

Elderly people who suffer seizures have a high risk for falls, bruises, broken bones, burns, and other injuries. When you work with clients who may have a seizure disorder, be sure to follow these key safety measures:

## **BATHROOM**

- Remind clients to keep the bathroom door *unlocked* (in case a seizure starts while they're in the bathroom).
- Keep water levels in the bathtub low or suggest the client take showers. Ask your supervisor about getting a shower chair with a safety strap. Put a non-slip mat or non-skid strips on the tub or shower floor.
- Keep all electrical appliances away from the sink or bathtub.

## **MEAL TIME**

- Avoid using breakable glasses and plates when serving meals to a client who may have a seizure.
- Make sure you know the Heimlich maneuver to assist a client who chokes on food during a seizure.
- Have clients eat sitting *upright* as much as possible.
- Consider offering hot liquids in a cup with a lid and spout to avoid possible burns.



## **GENERAL**

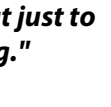
- Encourage clients to sit only in chairs that have arms—to help prevent falls.
- Remember that some people *wander* during a seizure. Be sure to protect your clients from wandering into unsafe areas.
- Teach your clients *not* to smoke cigarettes when they are alone.
- Move bedside tables away from the bed.
- Pad any sharp corners on the tables and other furniture in the client's living area.
- Provide frequent breaks during exercise periods with your clients. Becoming overheated could trigger a seizure.



# JUST for fun!

**What do all these people have in common?**

- **Vincent van Gogh** (Artist)
- **Sir Isaac Newton** (Scientist)
- **Neil Young** (Musician)
- **Napoleon Bonaparte** (An Italian General)
- **Agatha Christie** (Writer)
- **Charles Dickens** (Writer)
- **Michelangelo** (Artist)
- **Danny Glover** (Actor)
- **Leonardo Da Vinci** (Artist)
- **Edgar Allen Poe** (Writer)
- **Theodore Roosevelt** (26th US President)
- **Richard Burton** (Actor)



**Answer:** They were all diagnosed with epilepsy!

**"I have sometimes been wildly, despairingly, acutely miserable, racked with sorrow, but through it all I still know quite certainly that just to be alive is a grand thing."**

~ Agatha Christie

# LIFESTYLE CHANGES

**People with seizure disorders are able to maintain a “normal” lifestyle**—spending time with friends and family, participating in exercise programs, and living independently. However, people who have *frequent* seizures need to take reasonable safety precautions every day. For example, they probably wouldn’t want to be left alone with an infant grandchild or go swimming by themselves.

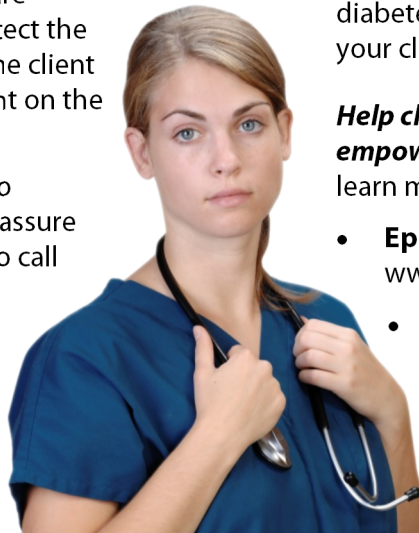
**Older people may deny they have a seizure disorder** because they remember a time when people with seizures were considered insane and could not be helped. Try to reassure them that times have changes and that seizures are not a sign of mental illness!

**People who have seizures may feel embarrassed, frustrated, or depressed about their condition.** Unfortunately, emotional stress can make a seizure disorder worse. Help your clients reduce and/or cope with the stress in their lives.

**Relaxation methods like deep breathing, yoga, and meditation** may be able to reduce seizures by reducing anxiety and stress.

**Make sure that your client’s friends and family members understand how seizures affect their loved one.** The more they understand, the more supportive they can be.

- Close friends and family members should be taught **how to respond** when a seizure happens. Teach them to protect the head, loosen clothing, ease the client to the floor, and turn the client on the side.
- Teach family members how to **recognize an emergency**. Reassure them that it’s not necessary to call 911 or take the client to the hospital unless the seizure lasts longer than five minutes or if one seizure is immediately followed by another.



**If your clients cook for themselves, encourage them to:**

- Use the back burners on the stove instead of the front ones.
- Turn saucepan handles inward.
- Cook foods in a microwave oven whenever possible.
- Use unbreakable containers for cooking, storing and serving foods.

**Low impact exercises (walking, swimming or yoga)** are important to help maintain bone density and prevent weight gain (which are problems associated with seizure medications).

**Some clients may benefit from carrying a small portable phone** or beeper in case they have to call for help and can’t get to a regular phone.

**If your clients have an aura before their seizures,** teach them to lie down on their sides as soon as the warning occurs.

**Encourage clients to wear a medical ID necklace or bracelet** so that people outside the home know they have a seizure disorder.

**If the cause of your client’s seizures has been determined,** you may be able to help the client avoid another seizure. For example, was uncontrolled diabetes the cause? Learn about diabetes and help your client get control of the disease.

**Help clients and their friends and family feel empowered and supported** by recommending they learn more by going to:

- **Epilepsy Foundation** at [www.epilepsyfoundation.org](http://www.epilepsyfoundation.org)
- **Epilepsy.com**
- **Google** the terms "seizure support group in (your town)" or "epilepsy support group in (your town)."



# SEIZURES AND MOODS

**People who suffer from seizures and epilepsy are more likely than others to also suffer from depression.**

- It is estimated that as many as 60 percent of people with seizures or epilepsy suffer from depression. However, at least half go undiagnosed and untreated.

In some cases, the depression is the result of the seizure itself. A mood change can occur before, during, or just after a seizure.

In other cases, the location of the seizure in the brain is the problem. If the seizure happens in an area of the brain that controls feelings or moods is more likely to lead to depression.

Additionally, the medications needed to control seizures may have a side effect of depression. If this is the case, a change of treatment may help.

**Learn to recognize the symptoms of depression. These include:**

- Weight changes.
- Loss of interest in everyday activities.
- Sleeping too much . . . or having trouble getting to sleep.
- Problems paying attention.
- Confusion.
- Irritability (especially in elderly males).
- Some elderly people may be suffering from depression even though they don't seem particularly sad.



**Be sure to report any signs of depression to your supervisor right away.**

Like epilepsy and seizures, depression is treatable. Medication, counseling, making lifestyle changes—or a combination of these things—are often successful in treating depression.



## 5 KEY points

### Key Points to Remember

1. A seizure happens when a burst of electrical activity causes a chain reaction of cells in the brain to over-react.
2. **Epilepsy** is usually diagnosed after a person has had at least two seizures that were not caused by some known condition like alcohol withdrawal or fever.
3. The percentage of individuals with seizures and epilepsy has **decreased in children** and **increased in the elderly**.
4. While there are *many* variations, most seizures follow this similar course:
  - There is a “trigger.”
  - The person feels the “aura.”
  - Then the seizure starts.
  - The seizure is followed by the postictal phase.
5. Most seizures can be managed with medication and lifestyle changes. For medication to be successful, it's important to keep a steady level of it in the blood. **This means taking each dose of medication on time!**



# FINAL TIPS ON SEIZURES & EPILEPSY

**Elderly clients may have trouble remembering to take seizure medicines on schedule.** While you are with the client, you can watch the clock, but if the client spends time alone, you can:

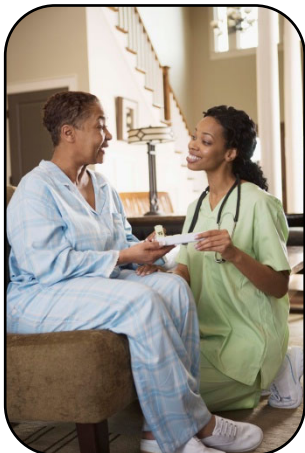
- Use a daily pill box organized by the time of day.
- Post reminder notes in the bedroom, bathroom, and kitchen.
- Set an alarm clock for when the next dose of medication is due.

**If you witness a seizure, try to take note of the following information:**

- What time the seizure started.
- What the client was doing at the time. *(For example, was the client eating, watching TV, or arguing on the phone?)*
- The type of seizure activity involved and how long it lasted.
- Any safety measures you took for the client. *(For example, did you help the client lie down?)*
- Any injuries the client suffered during the seizure. *(For example, did the client fall down and hit his or her head?)*

**If possible, encourage your clients to keep a “seizure journal”** in which they write all the details of every seizure. This may help identify any patterns—and provide clues about how to break those patterns.

**A small percentage of people are sensitive to flickering light patterns** such as the light from a television or a computer monitor. These types of light may trigger seizures. Wearing polarized sunglasses and taking frequent breaks from the TV and computer may help prevent seizures.



**The best ways to help clients control seizures is to encourage them to:**

- Take their medications as ordered.
- Get enough sleep.
- Eat a healthy balanced diet.
- Avoid drinking too much alcohol.
- Learn to manage the stress in their lives.



# WHAT I KNOW NOW!

*Now that you’ve read this inservice on seizures & epilepsy, take a moment to jot down a couple of things you learned that you didn’t know before.*

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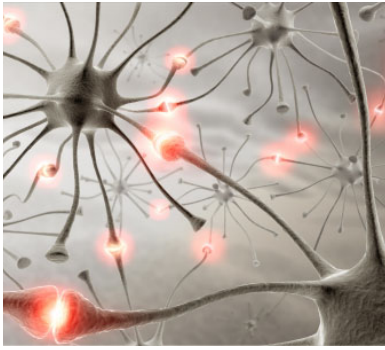
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*A Disease Process Module:*  
**Understanding Seizures**

EMPLOYEE NAME  
*(Please print):*

\_\_\_\_\_

DATE: \_\_\_\_\_

- ***I understand the information presented in this inservice.***
- ***I have completed this inservice and answered at least eight of the test questions correctly.***

EMPLOYEE SIGNATURE:

\_\_\_\_\_

SUPERVISOR SIGNATURE:

\_\_\_\_\_

**Inservice Credit:**

<input type="checkbox"/> Self Study	1 hour
<input type="checkbox"/> Group Study	1 hour

***File completed test in employee's personnel file.***

***Are you "In the Know" about seizures & epilepsy? Circle the best choice or fill in your answer. Then check your answers with your supervisor!***

- If you witness a seizure, you should:**
  - Keep track of how long the seizure lasts.
  - Help the person lie down on a flat surface.
  - Remove any dangerous objects near the person.
  - All of the above.
- The feeling that serves as a warning sign that a seizure is coming is called:**
  - A muscle twitch.
  - An aura.
  - The postictal phase.
  - A migraine headache.
- During the postictal phase, you should help the client:**
  - Avoid injury.
  - Eat well and exercise.
  - Rest and let the body recover.
  - Call for an ambulance or transport to the ER.
- True or False**  
The postictal phase can last from one day to as long as one week in an elderly person.
- True or False**  
Anti-seizure medications are only taken just after a seizure.
- True or False**  
You should place a spoon or a washcloth in a persons mouth during a seizure.
- True or False**  
All seizures are emergencies and require hospitalization.
- True or False**  
An elderly person who has a seizure is at risk for head injuries and broken bones.
- True or False**  
Most people have their first seizure after age 65.
- Fill in the Blanks**  
Status epilepticus is any seizure that lasts longer than \_\_\_\_\_ minutes and is considered an emergency situation.