

Carpe Diem – Seize the Day Blog

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Seizures happen when there is a burst of abnormal electrical activity among neurons, which are the brain's basic functional nerve cell units. A seizure — a hallmark of epilepsy, or seizure disorders — typically lasts from several seconds to a few minutes. Given the brain's role in controlling the body and its wide range of functions, many different physical symptoms accompany seizures. Often, symptoms are determined by which area of the brain is affected.

What Happens to Your Body at Each Stage of a Seizure

Seizures can be very unpredictable, with the electrical abnormalities affecting people differently. Not all people experience each stage or every symptom of a seizure. However, seizures tend to follow a similar pattern or progression and have a beginning, middle, and end. Read on to learn more about commonly experienced symptoms that may occur during each stage of a seizure.

Stage 1: The Beginning or Pre-ictal Stage

Also known as a prodrome, this stage precedes most seizure symptoms — but not all people who experience seizures are ever aware of being in this stage. Some have early warning signs (the prodrome) minutes to days before their seizure.

Prodromal phase symptoms might include:

- Headache
- Anxiety
- Confusion
- Irritability or mood changes

Some people experience auras, warning signs that might be considered the first symptom of the seizure itself. When auras occur, they may bring on physical, emotional, or thought changes, sometimes involving the body's senses (hearing, sight, smell, taste, and touch).

These initial symptoms include:

- Nausea
- Numbness or tingling
- Dizziness or lightheadedness
- Hallucinations
- Déjà vu (the sensation that something is familiar, but it has not happened to you before)
- Racing thoughts
- Strange feelings, such as fear or panic
- Phantom visions, scents, sounds, or tastes (sensing things that are not there)

Stage 2: The Middle or Ictal Stage

The bulk of seizure activity and visible symptoms occur in the ictal stage. During this phase, a person may experience several types of symptoms, including automatisms, convulsions, eye movements, and repeated purposeful movements.

Automatisms

Automatisms are repetitive movements — often involving the arms, face, or legs — that have no real purpose. Examples of automatisms include:

Chewing movements

- Getting dressed or undressed
- Smacking one's lips
- Blinking rapidly
- Playing with buttons or other objects
- Waving, hand-wringing, or other repeated hand motions
- Walking or running

Convulsions

A convulsion is a sequence of specific movements. During a convulsion, a person generally loses consciousness, gets physically rigid or tense, and makes rapid, jerky motions.

Eye Movements

During some seizures, a person's eyes may move in an unusual way, such as:

- Looking up or to one side
- Blinking rapidly or excessively
- Staring, usually at nothing in particular
- Repeated Purposeful Movements

During repeated purposeful movements, a person does not stop what they were doing before the seizure came on. For example, they might keep washing the dishes, tying their shoelaces, or pouring a glass of water.

Other Physical Symptoms

The middle stage of a seizure can bring on a variety of other physical symptoms, including:

- A racing heart
- Trouble breathing
- Sweating
- Changes in skin color
- Loss of control of the bladder or bowels

Stage 3: The End or Postictal Stage

The postictal stage can be thought of as the recovery phase after a seizure. Some people remember having a seizure, whereas others have no recollection of the event. How long the postictal phase lasts varies, depending on the type, intensity, and length of the seizure, as well as the part of the brain it originated from and whether loss of awareness occurred.

During the postictal phase, a person may experience some the following symptoms:

- Weakness, dizziness, or lightheadedness

- Headache or other pain
- Nausea or upset stomach
- Thirst
- Extreme tiredness (particularly after a tonic-clonic seizure)
- Confusion
- Memory loss

How Different Types of Seizure Affect Your Body

Different parts of the brain control different parts of the body and different actions. How your body feels or behaves during a seizure largely depends on which area of the brain is involved.

There are many types of seizures. Doctors generally classify epileptic seizures as either focal or generalized, based on where and how the abnormal electrical activity in the brain begins. If those details are not clear, a seizure may be classified as an unknown onset.

Focal seizures

Also known as simple partial seizures, focal seizures originate in just one part of the brain. Some people experiencing a focal seizure may remain conscious, while others may experience a dreamlike state or impaired awareness. Focal seizures may include auras.

During a focal seizure, you might have sensory symptoms (e.g., feeling dizzy or numb or hallucinating flashing lights), keep saying a word or phrase, or make repeated motions such as:

- Rubbing your hands
- Jerking of a distinct part of your body (perhaps an arm or a leg)
- Moving your mouth
- Walking in circles

Generalized Seizures

Generalized seizures affect both sides of the brain and typically cause loss of unconsciousness. This seizure type is further broken down into subcategories.

Generalized Tonic Seizures

Tonic seizures cause either the entire body to become stiff or rigid or just some muscles to tighten. A person who is standing when the seizure occurs is at risk of falling.

Generalized Atonic Seizures

During an atonic seizure, muscles in some or all parts of the body relax, usually becoming very limp (known as “low muscle tone”). If you experience this type of seizure, which is also known as a “drop attack,” you might:

- Be temporarily unable to move
- Drop your head and neck forward
- Slump or fall forward

Generalized Clonic Seizures

Clonic seizures are characterized by repetitive or rhythmic jerks and muscle movements. This type of seizure usually affects both sides of the body — specifically, the arms, face, and neck.

Generalized Myoclonic Seizures

Myoclonic seizures cause the upper body, arms, or legs to jerk or twitch.

Generalized Tonic-Clonic Seizures

Tonic-clonic seizures (previously known as grand mal seizures) are characterized by unconsciousness and cause the body to shake or jerk. You may have tremors (shaking), twitching, or jerking movements that you cannot control on one or both sides of your face, your arms or legs, or your whole body. This type of seizure can start in one part of the brain and then spread to other parts.

Physiological changes associated with tonic-clonic seizures include:

- Breathing changes
- Drooling
- Being unable to swallow
- Biting the tongue
- Clenching teeth
- Feeling extremely tired during the postictal phase
- Losing bladder or bowel control
- Screaming or crying

Although some people tend to experience the same type of seizure and symptoms, others may have different symptoms each time or have multiple kinds of seizures. Understanding what is happening to your body during a seizure can help you better understand your specific seizure disorder and may alleviate some of the stress and fear around having a seizure.

Editor's Note: The Carpe Diem – Seize the Day Blog will be distributed and posted weekly.
Always remember – **CARPE DIEM – SEIZE THE DAY!**

Steve.Hutton@epilepsy-ohio.org