

# GENERALIZED SEIZURES



## What are generalized seizures?

Seizures are caused by abnormal electrical activity in the brain. A generalized seizure is a type of seizure that starts on both sides of the brain at the same time. The seizure affects BOTH sides of the body. This type of seizure also causes a sudden change in consciousness (awareness) and behavior. There are several different types of generalized seizures, which are categorized by the electrical pattern seen on EEG and the behaviors that occur during the seizure.

Children may have more than one type of generalized seizure. The different types of generalized seizure are listed below:

## Generalized Tonic-Clonic Seizures

This is the most common type of generalized seizure. They were once called “grand mal” seizures. These seizures start with a sudden loss of consciousness and stiffening of the body, arms, and legs (tonic phase). The tonic phase is followed by the clonic phase. During the clonic phase, the arms and legs will begin to rhythmically jerk. The face may twitch and eyes may roll upward. Bladder or bowel incontinence may occur, as can drooling or salivation. Sometimes, the child may appear a bit blue in the face. Generalized tonic-clonic seizures typically last 1-3 minutes and usually stop on their own. The person will be very sleepy, confused, or agitated after the seizure. It may take them several minutes, or even a few hours, to return to normal behavior.

## Absence seizures

These seizures were once called “petit mal” seizures. Absence seizures cause a brief period of staring, or “blinking out”. The child cannot speak and is not aware during the seizure, but they do not collapse or have a convulsion. These seizures are very brief, usually under 10 seconds. This type of seizure stops quickly, and the child returns to their previous activity, usually without realizing that anything has happened. Because these seizures are so brief, they are often not immediately recognized, even if a child is having 50 to 100 seizures per day! EEG can often help detect absence seizures.

## Tonic Seizures

These seizures involve a sudden stiffness or rigidity in all the muscles of the body. Unlike a tonic-clonic seizure, the body does not have rhythmic (clonic) jerking of the body or limbs. If the child is standing or walking during a tonic seizure, they may fall and can be injured. These seizures are sometimes more difficult to treat.

## Myoclonic Seizures

These seizures are very rapid and brief. They involve a sudden, quick involuntary jerk of the body (myoclonus). Usually the muscle jerk involves both arms or legs, but occasionally it can be just one arm or leg. Even people without epilepsy can experience myoclonus while falling asleep...this is normal! But people with myoclonic seizures experience these jerks while awake. They often occur in the morning, after awakening. They can cause children to suddenly drop or throw an object, or fall down. Often these behaviors are dismissed as clumsiness.

## Atonic seizures

These seizures result in a sudden loss of muscle tone. The child’s body may become floppy (or atonic), causing a quick drop of the head, or a complete loss of posture. If the child is standing or walking, the seizure may cause them to suddenly collapse or fall, which can result in injury to the head or face. These seizures can be difficult to control with medicine. Protective headgear is often used for safety. Atonic seizures may also be known as “drop attacks”, or atstatic or akinetic seizures.

## How are generalized seizures treated?

Children with generalized seizures have epilepsy. They should be seen regularly by a child neurology medical provider who will likely recommend daily antiepileptic medicines to prevent seizures. The choice of medicine is based on the type of seizure and the individual needs of the child. The type of medicine, and the dose, may be adjusted if the child continues to have seizures. Some children require two or more medicines to control their seizures. Sometimes a few different medicines are tried before finding the one that will best help the child. Some children will outgrow the seizures. Others may require lifelong treatment for epilepsy.

**References:** <https://www.epilepsy.com/learn/types-seizures>

