

# **Generalised Onset Seizures**



Generalised seizures involve both hemispheres (sides) of the brain. Generalised seizures are presumed to affect a person's awareness or consciousness in some way and, consequently, may pose safety risks for the person.

Generalised seizures with motor onset involve changes in muscle activity, which can include limb stiffening, jerking, and loss of muscle control or convulsions. Generalised seizures with a non-motor onset are often called absence seizures and involve the person 'zoning out' for a brief period.

Generalised onset seizures include: myoclonic seizures; tonic-clonic seizures; tonic seizures; atonic seizures; absence seizures; and, myoclonic absence seizures.

#### **TONIC-CLONIC SEIZURES**

ര

During a tonic-clonic seizure the person's body stiffens and, if standing, they fall to the ground (tonic phase – stiffening of the muscles) followed by their limbs jerking in strong, symmetrical, rhythmic movements (clonic phase – the shaking of the body). A person experiencing this type of seizure may produce excess saliva from the mouth, go blue in the face, lose control of their bladder and/or bowel, or bite their tongue and/or cheek. The person may also create vocal noises as the muscles in the chest contract and the air rushes through the vocal cords, making a sound.

A person experiencing a tonic-clonic seizure will not swallow their tongue, so *do not* put anything in their mouth – this may present a risk to the person and to you. Instead the person should be put into the recovery position, discussed in the seizure first aid section, as soon as it is safe to do so. <u>Read more about seizure first aid here.</u>

Generally a tonic-clonic seizure lasts for one to three minutes, and the person often feels sleepy, confused or tired after the seizure has ended. If a tonic-clonic seizure lasts for more than 5 minutes, it is considered a medical emergency and an ambulance should be called. If you witness a stranger experiencing a tonic-clonic seizure, an ambulance should be called irrespective of how long the

ر 0800 37 45 37	⊠ national@epilepsy.org.nz	⊗ www.epilepsy.org.nz
© 2025 Epilepsy NZ	Monday to Friday 9am to 5pm	Page 1 of 3



seizure lasts.

This type of seizure used to be called a 'grand mal seizure' and, while it is not experienced by the majority of people living with epilepsy, due to television programs and movies it is the one most commonly associated with epilepsy.

## **TONIC SEIZURES**

Tonic seizures cause the person's body, arms and legs to become very stiff and rigid (tonic – stiffening of the muscles) and may cause a person to fall and injure themselves. This type of seizure often occurs during sleep. Tonic seizures are usually brief, lasting around 20 seconds.

## **CLONIC SEIZURES**

Clonic seizures are repetitive, rhythmic jerks that involve both sides of the body at the same time.

Clonic seizures are rare and most commonly occur in babies, and often these clonic movements are seen as part of a tonic-clonic seizure. The jerking movements may last for a few seconds to a minute, and a clonic seizure may sometimes be hard to distinguish from a myoclonic seizure.

## **ATONIC SEIZURES**

Atonic seizures cause a sudden loss or decrease of normal muscle tone, with the person often falling to the ground if standing prior to the seizure. Atonic seizures usually involve both sides of the brain and typically last for less than 15 seconds. If the person falls, these seizures can cause injury. It is sometimes recommended that the person wear a helmet for protection. These seizures are sometimes referred to as 'drop seizures' or 'drop attacks'.

## **MYOCLONIC SEIZURES**

Myoclonic seizures are brief, shock-like jerks of a muscle or a group of muscles, usually involving the upper body but sometimes the whole body as well. This type of seizure generally only lasts for a couple of seconds and can happen in isolation or in a cluster. When a myoclonic seizure ends, the person is usually awake and alert, and can usually continue what they were doing before the seizure.

#### **ABSENCE SEIZURE**

C

Absence seizures are brief, non-motor ones which usually occur in children and young people.

0800 37 45 37	⊠ national@epilepsy.org.nz	⊗ www.epilepsy.org.nz
© 2025 Epilepsy NZ	Monday to Friday 9am to 5pm	Page 2 of 3



These seizures cause a lapse in awareness and activity, and typically last only a few seconds. Absence seizures can be so brief that a person experiencing one is mistakenly thought to be 'daydreaming' or 'zoning out'. It is not uncommon for it to take a while for people to recognise these as seizures and seek medical advice. These seizures used to be referred to as 'petit mal seizures'.

#### MYOCLONIC ABSENCE SEIZURE

Myoclonic absence seizures include rhythmic myoclonic jerks of the shoulders, arms, and legs in conjunction with tonic contraction. These seizures can also include rhythmic protrusion of the lips, twitching of the corners of the mouth, or jaw jerking. The tonic component of the seizure mainly affects shoulder and arm muscles, and may cause elevation of the arms. These seizures tend to last for between 10 to 60 seconds.



⊠ national@epilepsy.org.nz

