

Optimal living with epilepsy

Experiencing or witnessing a seizure can be confronting for most people. Many people in the community have little knowledge or experience of epilepsy. Access to accurate information can bring a greater sense of confidence both for the person having the seizure and those witnessing it.

What is epilepsy?

Epilepsy is a common condition of the brain where there is a tendency to have recurrent seizures. It affects approximately 250,000 Australians regardless of age, gender, culture or background.

What is a seizure?

The brain is made up of millions of nerve cells called neurons. They generate electrical impulses and messages to produce thoughts, feelings and movement. A seizure occurs when the normal pattern of these impulses is disrupted, caused by a group of neurons rapidly firing all at once.

Seizures can cause changes in sensation, awareness and behaviour, or sometimes convulsions, muscle spasms or loss of consciousness, depending on where the seizure starts and spreads in the brain. Seizures vary greatly and most seizures are over in less than two minutes

Not all seizures are diagnosed as epilepsy.

What causes epilepsy?

There are many causes for seizures and not everyone has a clear reason why they have epilepsy. Anything resulting in damage or scarring to the brain may lead to seizures and epilepsy. At least half of people with epilepsy have no known cause for their seizure disorder. Some known causes include:

- Head injury
- Stroke or brain haemorrhage
- Lack of oxygen to the brain for a prolonged period (e.g. birth trauma, cardiac arrest, drug overdose)
- Brain infections (e.g. meningitis, encephalitis or brain abscess)
- Brain abnormalities at birth
- Brain tumours
- Genetic factors
- Degenerative conditions affecting the brain such as dementia

Recognising seizures

Three of the most common types of seizures include:

- Tonic clonic seizures
- Focal seizures
- Absence seizures



Tonic clonic seizures are the most recognised seizure type and can be frightening to witness.

- They begin with a sudden loss of consciousness, sometimes with vocalisation
- The body becomes stiff (tonic), followed by rhythmic jerking of the muscles (clonic). If standing the person will fall
- Breathing may be shallow or compromised causing the lips and complexion to go pale and bluish
- Excess of saliva may come out of the mouth, with blood if the tongue is bitten and there may be a loss of bladder control
- The seizure usually lasts less than 2 minutes followed by a period of confusion, agitation and tiredness. Headaches and muscle soreness are also common afterwards.

Focal seizures vary greatly, depending on where they start and spread within the brain. They are often not recognised as seizures by onlookers and can be mistaken for intoxication. Symptoms may include:

- A vacant stare, loss of expression or a vague, confused appearance.
- The person may not respond or may respond inappropriately.
- Some people have unusual behaviours such as chewing, repetitive movements, fidgeting, wandering around or mumbling.
- These seizures can last from 30 seconds up to 3 minutes and afterwards the person is often confused for a few minutes and may not remember anything about what happened

Absence seizures usually start in childhood (but can occur in adults) and are easily missed or misinterpreted as daydreaming or inattentiveness.. They essentially are a brief loss of awareness lasting 2-20 seconds. They can occur many times a day.

- The person appears to stare vacantly, there is loss of facial expression, and they are unresponsive
- The person is unaware of their surroundings during the seizure
- Recovery is quick and they resume their previous activity, with no memory of the seizure.

Seizure Triggers

Seizure triggers are circumstances that can make a person with epilepsy more likely to have a seizure. If they can be identified, strategies can be put in place to help reduce seizures. Reported seizure triggers include:

- Lack of sleep
- Physical or emotional stress
- Fever or illness
- Flashing lights or geometrical patterns
- Missed medication
- Hormonal fluctuations
- Alcohol or drug use

Seizures and Risk

Seizures can sometimes lead to injuries and accidents; but they can also occasionally be more serious, even contributing to, or causing death. Different types of seizures carry different risks, so your risk depends on the type of seizures you have, and your activities and lifestyle.

By understanding these risks, you can take positive actions to keep yourself or your family member as safe as possible. For more information about epilepsy and risk, [click here](#).



Need help?

Epilepsy Action Australia can help you or your family member who has had a seizure or diagnosed with epilepsy.

As a national organisation, Epilepsy Action Australia deliver services that increase epilepsy awareness, understanding, knowledge and skills to assist people with epilepsy across Australia improve their quality of life. We deliver services nationally, with a commitment to delivering equitable and consistent services to all people irrespective of where they live.

Epilepsy Action Australia's services include:

- **Epilepsy Nurse Line** – speak with a registered nurse on **1300 37 45 37** or email us on epilepsy@epilepsy.org.au
- **Epilepsy Nurses** – specialist nurses for support, information, advice and advocacy
- **Community Education and Training** – online, webinars or in-person. [Click here](#)
- **Factsheets** - covering a variety of topics. [Click here](#)
- **First Aid Posters and Animations** – [Click here](#) (available in other languages)
- **MyEpilepsyKey** – offers information for youth, adults and parents of children newly diagnosed with epilepsy. It provides access to resources and self-management tools. [Click here](#)
- **Online Academy Courses** – offers a wide range of courses from an introduction to epilepsy and seizure first aid through to more comprehensive training courses catering for families, school children, carers, disability and support workers, school staff & health workers. [Click here](#)
- **Online Communities and Support** - connect with others who may be having similar issues and experiences with their epilepsy. [Click here](#)
- **Online tools and resources** Have a look at our many online tools and resources designed for specific audiences. [Click here](#)
- **Seizure Management Plans** - a practical tool that can be used by all caregivers in all settings to manage seizures and seizure emergencies, treatments and safety. These can be done online, or with an Epilepsy Nurse. [Click here](#)
- **SUDEP and Seizure Safety Checklist** a resource to assist clinicians and those living with epilepsy to discuss seizure risks, including SUDEP. [Click here](#)
- For information on all these services and more, visit our **website** at www.epilepsy.org.au



FIRST AID FOR SEIZURES

TONIC CLONIC SEIZURE

Seizures where the body stiffens (tonic phase) followed by general muscle jerking (clonic phase).



DO

- ✓ Stay with the person
- ✓ Time seizure
- ✓ Keep them safe: protect from injury especially the head
- ✓ Roll onto side after jerking stops
(immediately if food/fluid/vomit in mouth)
- ✓ Observe and monitor breathing
- ✓ Gently reassure until recovered

DO NOT

- ✗ Put anything in the person's mouth
- ✗ Restrain the person
- ✗ Move person unless in danger

FOCAL SEIZURE

Non-convulsive seizures with possible outward signs of confusion, inappropriate responses or behaviour.

- Stay with the person
- Time seizure
- Gently guide away from harm
- Reassure until recovered
- DO NOT restrain the person unless in danger

CALL 000 FOR AN AMBULANCE IF:

- You are in any doubt
- Injury has occurred
- There is food/fluid/vomit in mouth
- Seizure occurs in water
- Person has breathing difficulties after jerking stops
- Another seizure quickly follows
- Seizure lasts longer than 5 mins
- The person is non-responsive for more than 5 mins after the seizure ends

