

Seizures

What is a seizure?

A seizure (also called a 'fit' or *convulsion*) occurs when there is a 'disruption' or a brief break in the electrical activity between the *neurons* (specialised brain cells) in the brain.

There are many different types of seizures, varying from *absence seizures* that look as if a person is staring into space, to more obvious convulsions that involve the entire body. Some people only have one seizure in their lifetime while others may have many. Most seizures last less than five minutes.

Seizures are not always a sign of *epilepsy* (a medical condition that causes seizures). They may be caused by brain injury or infection, fever, drugs or excessive alcohol use. The cause of a seizure may not always be obvious.

Seizures are often very frightening for the observer, especially if they have never seen one before. Brain damage resulting from a seizure is very rare.

Types of seizures

Below are some common types of *generalised* seizures.

- **Tonic clonic** – The person may cry out (wail) before losing awareness (consciousness). Their entire body stiffens and starts shaking or jerking violently. They may fall to the ground and may injure themselves as a result. Their eyes may roll back (so you can only see the white part) and they may turn blue around the lips or in the face. Saliva or fluid may come out of their mouth (this could be red if they have bitten their tongue). They may be *incontinent* of urine (wet their pants). They are confused and drowsy (groggy) once the fitting stops.
- **Absence** – The person may have a fixed gaze; as if a person is staring into space or their eyelids may 'flicker'. There is no other obvious jerking. They do not respond when you talk to them.
- **Myoclonic** – Twitching, jerking or 'tremor' is seen in one or more limbs. The person may be awake.
- **Febrile convulsion/seizure** – Happens in children aged between six months and six years due to a sudden change in temperature (when they have a fever). This seizure may appear like a tonic clonic seizure (as explained above).

Treatment

In the emergency department, the person will be closely monitored and any injuries they may have sustained will be treated.

Anti-seizure medication is sometimes given through a drip inserted into a vein (*intravenously*) which will make them drowsy. It may take them a few hours for them to recover and get back to their normal self.

Do not let the affected person **drive** or operate machinery within 24 hours of a seizure or until they are given clearance by their health care professional.

Some people will need to stay in hospital for observation, particularly if they have more than one or prolonged (lasting longer than five minutes) seizures.

The person may have some tests, including:

- blood tests
- an EEG (*Electroencephalogram*) – which looks at the brain waves and electrical activity
- a CT (*computerised tomography*) – specialised scan of their brain (sometimes called a CAT scan)
- an MRI (*magnetic resonance imaging*) scan – another specialised scan of the brain.

What to expect

It is usual for a person to be confused, sore, tired or groggy for some time after the seizure has stopped. They may sleep for several hours after the seizure.

They may not remember what happened while they were in hospital or that they had a seizure.

Follow-up

The person may be asked to follow up with their local doctor or be given a referral to see a specialist doctor (*neurologist*). Tests may be ordered at an outpatient clinic (such as an EEG at a *first seizure clinic*).



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How can I help?

There are some things you can do to help a person who is having a seizure:

- Remember to stay calm.
- **Do NOT put anything in the person's mouth** (including your fingers) or give them anything to drink or eat (including any medication) until they have regained consciousness and are fully awake and alert (not sleepy or confused).
- Ensure the person cannot injure themselves – remove sharp or hard objects (if possible) from around the person and place something soft under their head. **Do not** try to restrain the person. Make sure you do not get injured if they are thrashing around.
- Take note of what time the seizure began and time how long it goes for; if it is longer than five minutes or you are very worried and need help then call an ambulance (dial 000).
- Place the person on their side once the seizure has subsided and their body has softened (it is stiff and rigid during a seizure). This helps the person breathe easier and allows the saliva to drain from the mouth.

Seeking help



In a **medical emergency** go to the nearest hospital emergency department or call an ambulance (dial 000). Do this if:

- you know or think it may be the person's first seizure
- you know or think the person is diabetic
- the person is pregnant
- the seizure has not stopped after five minutes or you are very worried and need help
- the seizure happened in water
- the person has not regained consciousness or woken up after the seizure has stopped
- the person has a seizure straight or shortly after the last one has stopped.



For other medical problems see your local doctor or health care professional.



For health advice from a Registered Nurse you can call **NURSE-ON-CALL 24 hours a day** on **1300 60 60 24** for the cost of a local call from anywhere in Victoria.*

NURSE-ON-CALL provides access to **interpreting services** for callers not confident with English. Call **1300 60 60 24**.

*Calls from mobile calls may be charged at a higher rate

Notes:



Want to know more?

- Ask your local doctor or health care professional.
- Visit the **Better Health Channel** www.betterhealth.vic.gov.au (search under seizures or epilepsy)

If you would like to receive this publication in an **accessible format**, please phone 9096 8064 or email edfactsheets@dhs.vic.gov.au

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