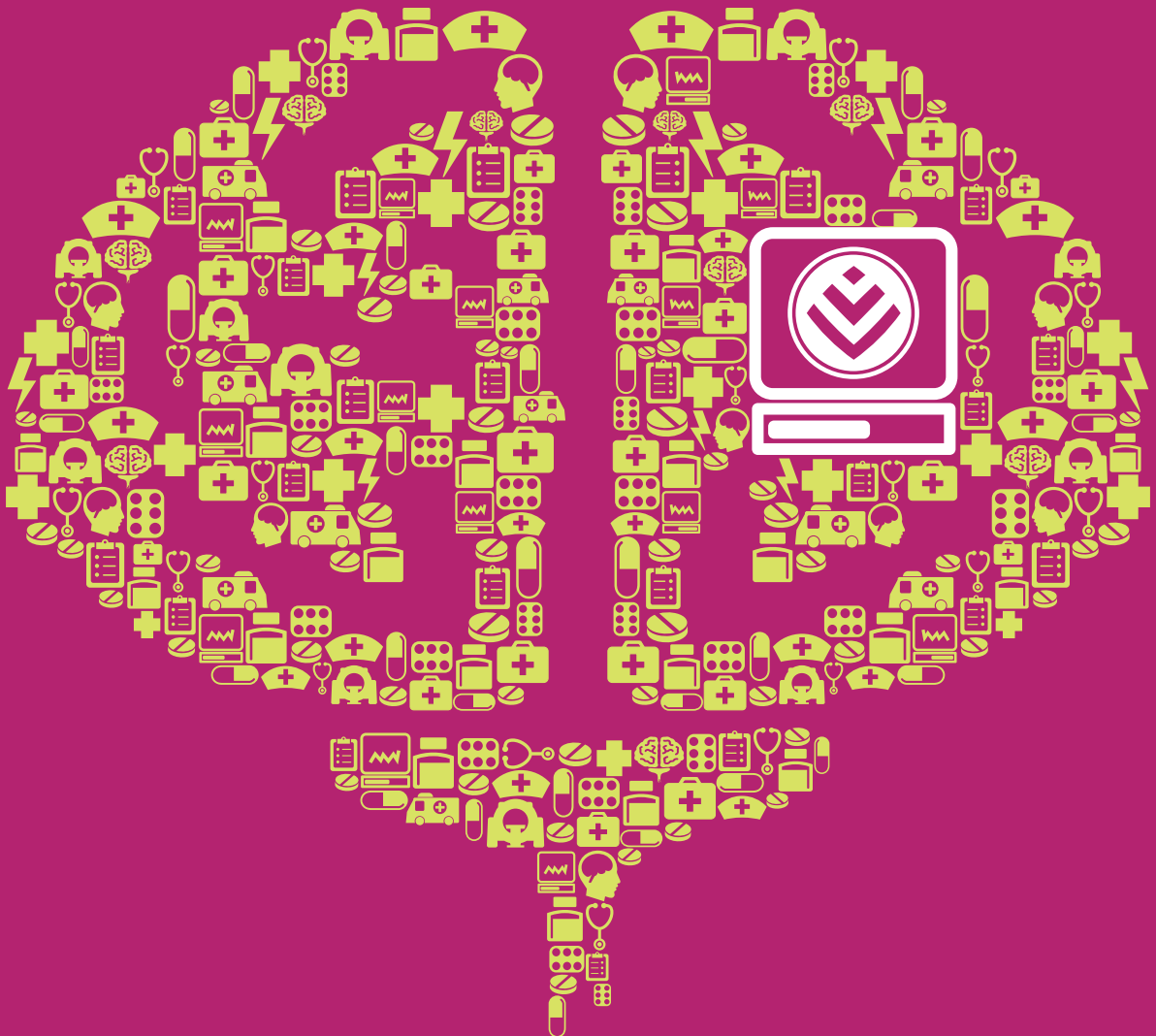


+ DISCOVERY HEALTH MATTERS

The electrical
storm –
epilepsy





Discovery Health Matters

Discovery Health Matters is a layman's guide to important, but often misunderstood topics in healthcare. The information contained in this document is for informational purposes only, and should not be used to replace professional medical advice, or be used to diagnose or treat a medical condition.



What is epilepsy?

Our brains are made up of billions of nerve cells (neurons) that communicate via electrical and chemical signals. There is electrical activity in our brains all the time.

When there is a sudden excessive electrical discharge (like a power surge, known as epileptic activity), it disrupts normal brain activity, and results in a seizure or fit. Some seizures are easily detectable (like when people fall down), while others are more difficult to identify (like absence seizures, when there are few or no outward symptoms).

One seizure does not mean you have epilepsy. To have epilepsy means you have had several epileptic seizures and could have more in the future. Most seizures don't last long and are easy to deal with. People with epilepsy can enjoy full and rewarding lives and even excel in sport (Jonty Rhodes), the arts (Vusi Mahlasela), politics (Lenin, Joan of Arc, Napoleon Bonaparte), science (Alfred Nobel), business (Pat Pillai) or any arena they choose.

Epilepsy is a neurological condition and does not in any way affect someone's intelligence. People with epilepsy have the same range of intelligence as the rest of the population.

Since the symptoms associated with seizures can be similar to other medical and neurological problems, it's important to see your general doctor (GP or family physician) first to check your overall health and eliminate other causes for your symptoms. Your doctor will then refer you to a neurologist for further tests and diagnosis, as well as to recommend treatment. You may be supported by a social worker.



What causes epilepsy?

According to the national epilepsy organisation, Epilepsy SA, in 66% of cases the underlying cause of epilepsy is unknown. This is known as idiopathic epilepsy. When the causes can be identified it is called symptomatic epilepsy. Some of the possible causes include: Head injuries, birth injuries (such as a lack of oxygen during delivery), alcohol and drug abuse, strokes, degeneration from ageing, disease like the brain infection meningitis, or metabolic or biochemical imbalances or disturbances.

Very occasionally the cause is a brain tumour.

For many of the approximately six out of ten people with idiopathic epilepsy, it is just part of how they are made that makes them more likely to have seizures.



Risk factors

Epilepsy can be diagnosed in any person at any time, regardless of age, race, sex, geographic location or socio-economic status. The condition can begin at any age, although its onset is most often in childhood or in the later years of life. The frequency of seizures in childhood may be partly due to low seizure threshold of some children. A seizure threshold is the level at which the brain will have a seizure and the seizure threshold generally rises as the brain matures. This may partly explain why children with epilepsy often outgrow the condition. In the elderly, there is an increased incidence due to strokes and ageing of the brain.

There are many types of epilepsy, but whichever type affects you, safe and sustainable treatment is available.



What triggers seizures?

While some people are not able to identify specific events or circumstances that affect seizures, others are able to recognise definite seizure triggers. Seizure triggers can include stress, poor quality of sleep, and too much alcohol. Some people say they have more seizures if they skip meals. Another common trigger is not taking your epilepsy medicine as prescribed. A very small number of people with epilepsy have seizures triggered by bright flashing or flickering lights (photosensitive epilepsy). It is useful to learn to identify your seizure triggers so that seizures can be avoided where possible.



Types of seizure

Partial (focal) seizures

In these seizures, the epileptic activity starts in only one part of the brain. The person may stay alert during this type of seizure or they may not know what is going on around them. They may have no control over parts of their body that move, or they may have unusual sensations or feelings. Sometimes, other people may not even be aware that the person is having a seizure.

Partial seizures can be very brief or last for a few minutes. Sometimes, epileptic activity starts as a focal seizure, spreading to the rest of the brain, becoming a generalised seizure.

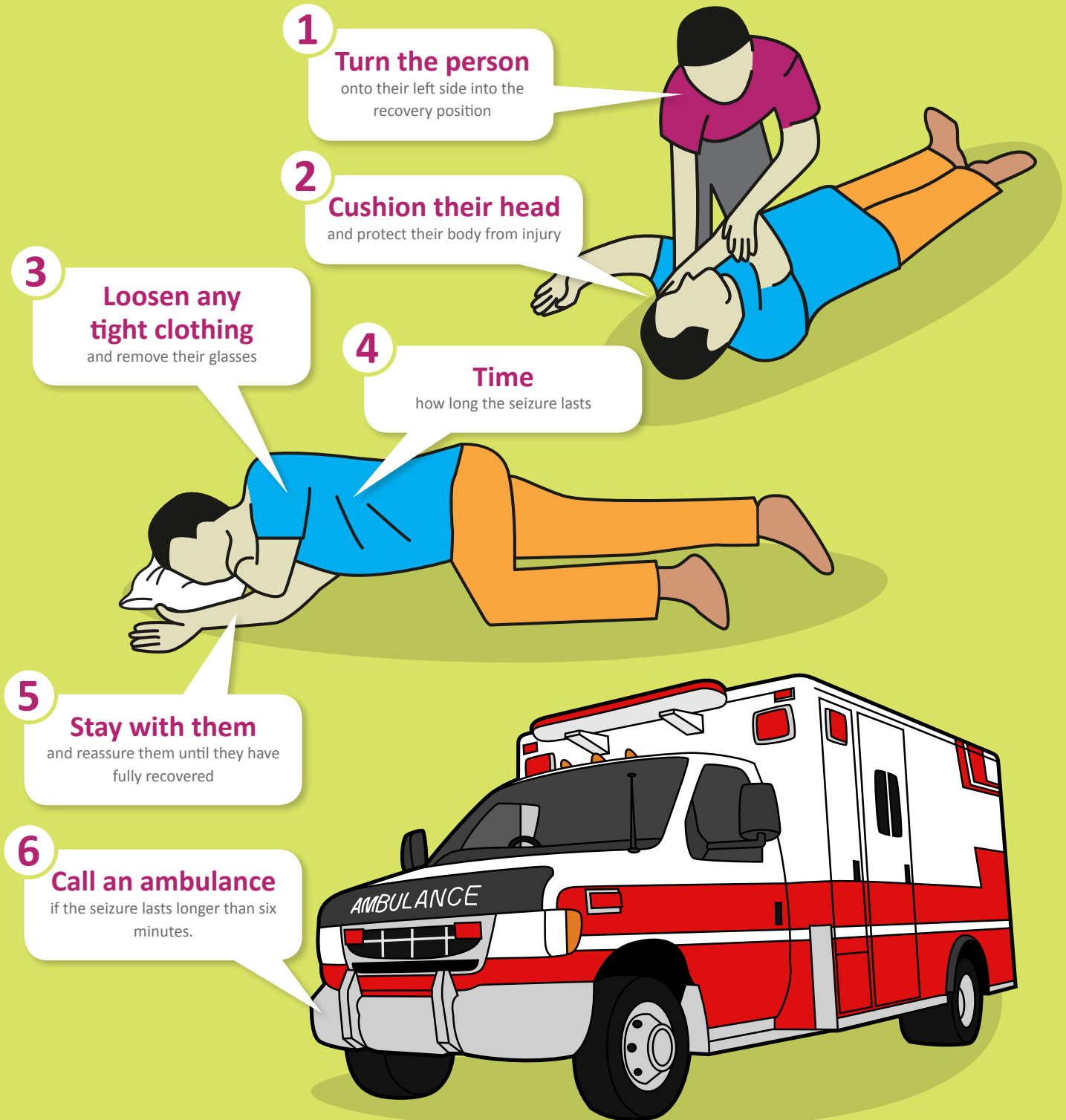
Generalised seizures

These seizures involve epileptic activity in both halves of the brain. The person loses consciousness during this type of seizure, although sometimes it can be so brief that no one notices. Sometimes it can last for several minutes. The muscles in the body may stiffen or jerk and the person may fall if they are standing when the seizure starts.



Seizures – how to help

If you're with someone when they are having a seizure, here's how you can help:



DO NOT move someone having a seizure or try to pick them up unless they're in direct danger
NEVER put anything in their mouth or burn anything in front of their nose.
NEVER give the person anything to eat or drink or any extra medicine.



Treatment:

Living positively with epilepsy

The standard treatment for epilepsy is the regular and ongoing use of anticonvulsant or antiepileptic medicine.

“Treatment with anticonvulsant medicine dramatically changes the quality of life of people with epilepsy. For hundreds of thousands of people these medicines mean the difference between a fearful, isolated existence and a confident life and successful employment based on the knowledge that the likelihood of seizures is small,” says Marina Clarke, national director of Epilepsy South Africa.

There are a number of different anticonvulsant medicines available. None of these can cure epilepsy. However, increasing success in seizure prevention is evident provided that medicine is taken as prescribed. Anticonvulsant medicine may be prescribed as a single medicine or in combination with other medicines. If a person has more than one kind of epileptic seizure, they may need more than one type of medicine to maintain control. This is because medicine that prevents one type of seizure may not necessarily be effective for another type. However, physicians try, wherever possible, to limit the number of medicines prescribed and to use a single medicine if they can.

People may react differently to the same medicine, and some experience side effects while others do not. It's important to work with your doctor to find the medicine and dosage that is right for you. Your doctor will aim to find the balance, when prescribing, to achieve the greatest degree of seizure control with the fewest side effects, however this may take some time.



Medicine tips

- **Take medicine exactly as prescribed:** Too little of your medicine may mean seizures will not be well controlled. While too much will result in undesirable side effects. Don't stop your medicine suddenly. You could risk a medical emergency in the form of non-stop seizures which could be life threatening. Keep in touch with your doctor to let him know if you are having any problems with your medicines.
- **Go to all your follow-up appointments.** Anticonvulsant medicines are safe and generally effective, but careful monitoring is recommended.
- **Don't try other people's medicine.** Even if a friend has better control with different medicine, remember we're all different and medicines react differently in our systems. Check with your doctor first.
- **Both alcohol and your medicine act as depressants** and the one may intensify the effect of the other. It's best not to drink at all when using anticonvulsant medicines.
- **Don't drive or operate power tools** when starting new medicine until you know how it affects you. It may make you drowsy at first.
- **Don't assume that if you've missed a few doses of your medicine you can make them up safely by taking them all at once.** What you need is a certain amount of medicine taken at regular intervals.
- **If you have trouble remembering when to take your medicine** (especially if you are taking more than one type), try counting out each day's supply of medicine and storing them in special containers you can buy from a pharmacy.
- **Don't run out of medicine.** If you are going on a trip, make sure you have enough to last until your return and carry a copy of your prescription with you. If you are going overseas find out from your doctor what the medicine is called abroad (medicines often have different names in different countries).
- **Keep all medicine locked up and away from children.** If you plan to carry medicine in a container other than a pharmacy bottle, make sure it is labelled.



Eat well, be well

“Eating regular well-balanced meals can help increase your energy levels and boost your immune system, which may help you to feel more positive and reduce the risk of seizures,” says Dr Tuscka du Toit, dietitian and nutritional consultant.



Handle with care: Women and epilepsy

In general, epilepsy should not prevent a woman from planning a family – but planning in advance is very important. Some experts say that 90% of women with epilepsy deliver perfectly healthy babies, and that figure can increase with careful advance planning.

Pregnancy brings some special considerations for women with epilepsy, because seizures and certain medicine taken during this time may sometimes carry a risk of harm to the developing foetus. Most of the time, these risks can be minimised by taking precautions before and during pregnancy. Women need to start taking folic acid before conception and have early and ongoing antenatal care.

If you are planning a baby, be sure to discuss this with your doctor in advance.



Parenting a **child with epilepsy**

It can be an enormous shock to learn your child has epilepsy. You, as a parent, will be their greatest advocate, and it's important that you learn as much as you can about the condition so that you can empower your child with accurate information. This will also help you to teach them that with the right medicine and care, they can control their epilepsy, rather than allowing it to control them.

- Ensure your child has a thorough medical assessment by a qualified professional.
- Always emphasise your child's abilities, concentrating on what he can do, not what he can't do.
- Be open and honest about the condition with yourself, your child, their teacher and friends. Make sure your child knows epilepsy is nothing to be ashamed of, and they didn't do anything to cause it.
- Emphasise any activities that build self-confidence and feelings of self-worth.
- Help your child to learn accurate information about epilepsy so they can respond confidently when questioned.
- Make sure your child takes their medicine properly – exactly as prescribed.
- Maintain a routine at home that includes plenty of rest, three balanced meals, and regular exercise. A regular routine may help to limit seizures.
- Let your child know they are safe and properly cared for during a seizure, this may help alleviate fear.
- Try not to overprotect your child. And don't let seizures become an excuse for your child to get out of doing chores or accepting responsibility.
- Don't use epilepsy as an excuse for lowering your expectations of your child. It's important for them to know they are the same in your eyes as your other children, and that they can achieve anything they set their minds to.



Support someone with epilepsy by:

- Emphasising what they can do, not what they can't do.
- Treating them the same as you would anyone else.
- Helping them integrate into as many activities as possible.
- Not overprotecting them or making them the centre of attention.
- Not blaming them for their condition.



How Discovery Health Medical Scheme covers epilepsy

Medicine

Approved medicine for the treatment of epilepsy is paid from the Chronic Illness Benefit (CIB), if the condition meets certain clinical entry criteria. First-time applications must be completed by a neurologist, specialist physician or a paediatrician if it is a child. We pay approved chronic medicines on Discovery Health's medicine list (formulary) in full, or we pay up to a set monthly rand amount (Chronic Drug Amount) for medicine not on the medicine list. Where the cost of approved medicine exceeds this monthly amount, members will need to pay the difference from their own pocket. Call 0860 99 88 77 to apply for the Chronic Illness Benefit by requesting a form.

Fax the completed and signed application form to 011 539 7000; or email it to CIB_APP_FORMS@discovery.co.za. You can also post it to: Chronic Illness Benefit Department, Discovery Health, P O Box 652919, Benmore, 2010.

Doctor's visits

General Practitioners (GPs)

We pay for GP visits from the available funds in the day-to-day benefits or the Insured Network Benefit if the member has access to it on their plan.

If you are registered on the Chronic Illness Benefit for epilepsy, the Scheme will pay four of your network GP visits per year and your day-to-day benefits will not be used for this.

Specialists

If the member is registered on the Chronic Illness Benefit for epilepsy, the Scheme will pay three network specialist visits a year (and the day-to-day benefits will not be used for this). If they use a non-network specialist, the Scheme will still pay three consultations without using the member's day-to-day benefits, but they will have to fund the difference between the amount the specialist bills and what the Scheme will pay.

Outside of the three visits funded by the Scheme, specialist visits are paid from the available funds in the member's day-to-day benefits.

Tests and investigations

Your doctor may need to prescribe certain tests like an electroencephalography (EEG) and possibly pathology tests. The Scheme will cover one EEG test a year without using the day-to-day benefits. Three specific pathology tests will be covered in this way as well.

All other tests and investigations are paid from the available funds in the day-to-day benefits. Pathology tests are also paid from the Insured Network Benefit if the member has access to their plan.

Allied, therapeutic and psychology treatment

Allied and therapeutic healthcare services include acousticians, biokineticists, chiropractors, counsellors, dietitians, homeopaths, nurses, occupational therapists, physiotherapists, podiatrists, psychologists, psychometrists, social workers, speech and hearing therapists. We pay for these services from the available funds in the day-to-day benefits.

In hospital

If a member is admitted to hospital in an emergency, the most important thing is for the member to get the immediate attention they require. The hospital, a family member or friend must call the Scheme within 48 hours of a member having been admitted, to arrange for an authorisation number.

If the admission is planned, the member or their doctor must notify the Scheme at least 48 hours before they are admitted, so that the Scheme can advise the member of exactly how the admission will be covered.

Hospital admissions are funded in accordance with the health plan chosen by the member and certain co-payments and/or exclusions may apply.



Epilepsy facts

- Epilepsy is the most common neurological condition.
- About 1 in every 100 people will develop epilepsy.
- A single seizure does not necessarily mean you have epilepsy.
- Epilepsy can affect anyone, at any age.
- 75% of people with epilepsy have had their first seizure before the age of 20.
- Up to 80% of people will have their epilepsy controlled by medicine.
- Many children with epilepsy will outgrow it.
- 1 in 20 people have a seizure at some time in their lives.
- A seizure is caused by abnormal chemical activity of the brain.
- Slightly more males than females have epilepsy.
- There are different forms of epilepsy and different types of seizures.
- Some people's seizures follow a definite pattern while others' are unpredictable.
- Some people get a warning before a seizure.
- Most seizures are over quickly and are easily dealt with.
- Anyone can develop epilepsy at any stage of life.
- "For most people with epilepsy, the biggest problem they have to face is other people's attitudes to epilepsy," says Tim de Villiers, a person with epilepsy serving as national board member of Epilepsy South Africa.



Useful resources and additional information

Epilepsy SA - <http://epilepsy.org.za>

Association for Skills Development South Africa - <http://www.asdsa.org.za/company/about>

International League Against Epilepsy - <http://www.ilae.org/>

International Bureau for Epilepsy - <http://www.ibe-epilepsy.org/>

Epilepsy Foundation (US) - <http://www.epilepsyfoundation.org/>

Centres for Disease Control and Prevention (US) - <http://www.cdc.gov/epilepsy/basics/faqs.htm>

Epilepsy Action (UK) - <http://www.epilepsy.org.uk/>



Discovery | 155 West Street | Sandton | 0860 99 88 77 or 083 123 88 77 | www.discovery.co.za

Discovery Health Medical Scheme Registration Number 1125.

Discovery Health (Pty) Ltd. Registration number: 1977/013480/07. An authorised financial services provider.