

Medications to control seizures are called antiepileptic drugs (AEDs). These medications do not cure epilepsy, they control or lessen seizures, preferably with minimal or no side-effects. Medication is generally the first treatment option for seizures, because it's tried and tested and a relatively non-invasive form of treatment.



Choice of medication

The AED chosen for you will firstly depend on the type of epilepsy, as some medications work better for certain types of epilepsies. The neurologist will also consider your age, gender, possible medication side effects, desire to have children, employment, lifestyle, and the need to drive, plus many other individual factors.

Starting medication

Medication is usually started slowly, gradually building the dose over days or weeks, depending on the drug. This "start low, go slow" is a common approach. During this time, its effect should be closely monitored. When the desired effect is reached – less or no seizures with minimal side effects – the dose can be stabilised. If the medication does not work well, a second medication may be added and the first one may be gradually withdrawn.

Some people may need to trial several medications before they obtain the best seizure control.

In children, medication is usually calculated by body weight and sometimes as a child grows, seizures may occur. This doesn't mean the medication has stopped working or the seizures are getting worse. It may simply mean the medication dose may need adjusting because the dose isn't high enough for their body weight anymore.

Many people with epilepsy achieve seizure control with one medication. However, for some, more than one medication will be needed.

How long do I need to take the epilepsy medication?

How long someone takes an AED varies from person to person. It depends on several factors including:

- the type of epilepsy or syndrome
- side effects of the medication
- how the seizures have responded to the medication
- the length of time seizure-free
- the likelihood of the seizures recurring
- other medical conditions or medications the person may have
- social factors for example; driving and employment.

For some, therapy is life-long, whilst others may grow out of their epilepsy or have a remission from seizures.

Stopping medication

Any withdrawal from medication should be done slowly and always under the advice and supervision of the prescribing doctor.

Suddenly stopping medication can provoke a seizure and possibly a medical emergency

Unwanted effects

Unwanted effects or side-effects, mostly occur when starting a medication. They should lessen or disappear after the first few weeks of treatment, but you should inform your GP or the prescribing doctor, especially if the side-effects persist, are intolerable or are listed as serious. In these cases, the medication dose may be lowered or withdrawn and the unwanted symptoms will usually resolve within a few days or weeks.

Some AEDs can lessen the effectiveness of hormonal contraceptives and some hormonal contraceptives can affect the uptake and absorption of some AEDs. This may mean that the type or dose of a contraception may need to be changed.

Some AEDs are known to have a higher risk of causing birth defects, so women planning a pregnancy, should plan well ahead and discuss medication choice with the neurologist.

Children can sometimes have the opposite reactions to adults. For instance, a medication that makes some adults drowsy may make a child overactive.

All known unwanted effects are listed in the manufacturer's product information sheets. Ask your pharmacist for one or search the TGA [here](#).

Unwanted effects from AEDs can include:

- increase in frequency and severity of seizures
- any rash, skin redness, acne, excessive sweating, swelling, tingling or itching, yellowing of the skin or eyes, hot flushes
- excessive hair loss or excessive body hair growth
- flu-like symptoms
- gastric upsets such as changes in taste, dry mouth, sore throat, mouth ulcers, heart burn, difficulty swallowing, nausea, vomiting, diarrhoea, constipation, change in appetite, weight gain or loss
- drowsiness, dizziness, clumsiness, headache, blurred or double vision, tremor
- mood change such as agitation, irritability and confusion, depression, thoughts of self-harm or suicide
- slurred speech, difficulty concentrating or remembering, nervousness, hearing voices or seeing visions of things that do not exist (hallucinations)
- chest pain, irregular or rapid heart rate, difficulty breathing or coughing, bruising or bleeding, dark urine,
- uncontrollable irregular or rapid eye movements
- pain, muscle weakness, unsteady walking
- missed or painful periods, vaginal discharge, itching or swelling

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NATIONAL EPILEPSY LINE

1300 37 45 37

Available in all Australian states and territories from 9am to 5pm seven days a week



Blood level monitoring

The main goal of AED therapy is good seizure control with few or no side effects. If this is the case, then blood level monitoring is not usually necessary. There are some situations where medication blood level monitoring is needed such as when someone is:

- taking phenytoin (Dilantin)
- having more seizures than usual or changes in seizures or seizure control
- taking many medications (polytherapy)
- a young child, elderly or disabled
- having what are thought to be unwanted effects
- suffering another medical condition that requires monitoring

If a person is having unwanted effects from their medications or they are feeling unwell, the doctor may suggest other tests to check the levels of substances in the person's blood, bone marrow and liver.

Taking antiepileptic medications regularly as prescribed is crucial to controlling seizures. Changing doses may provoke unwanted effects and seizures

Staying with the same brand

There can be many different names for the same medication. Once seizures are controlled with a medication it is important to avoid changing brands as there is a small risk of "breakthrough" seizures for some people. Different forms of antiepileptic medication are effective but should not be substituted. If you have a medication that works, do not change brands even if the pharmacist suggests it.

Missing doses

Missing a medication dose is the most common cause of breakthrough seizures. Missed medication can trigger seizures in people with both well-controlled and poorly controlled epilepsy. Seizures can be more frequent, or more severe or longer than normal. There is a small risk of status epilepticus (prolonged seizures) which is a medical emergency and can lead to death if the seizures can't be stopped.

It's very individual, but if only one dose is missed, the chances of having a seizure may be only slightly higher. However, missing one dose is more likely to cause seizures if someone is only taking a once-a-day dose because one dose is a full day of medication. If medication is taken two to four times a day, the seizure risk from missing one dose is less. But missing several doses consecutively increases the likelihood of a seizure.

What to do if you forget a dose

This should be discussed with the neurologist when first starting a medication. Everyone's situation is different and there may be varying instructions for different medications



What to do if you forget a dose

- In general, if someone takes medication morning and night and the morning dose is forgotten – if its lunchtime or earlier take the forgotten dose as soon as possible. If it's after lunchtime and getting too close to the evening dose it's better to omit the morning dose and just take the evening dose.
- For once-daily medication, the forgotten dose should be taken as soon as you remember it.
- It is also important that if a dose is missed, not to take twice as much the next time because a larger than normal dose could cause side-effects.

For more information about what to do if you miss a dose see Dr Dan McLaughlin discuss it [here](#)

If you are unsure of what to do if a dose is missed or a double dose is taken, contact your prescribing doctor, pharmacist, epilepsy nurse or medicines line on 1300 888 763.

Medications used for epilepsy

Brivaracetam (Briviact)	Methylphenobarbitone (Prominal)	Sodium valproate (Epilim)
Carbamazepine (Tegretol)	Midazolam (Hypnovel)	Stiripentol (Diacomit)
Clobazam (Frisium)	Nitrazepam (Mogodon)	Sulthiame (Ospolot)
Clonazepam (Rivotril)	Oxcarbazepine (Trileptal)	Synacten (ACTH)
Diazepam (Valium)	Perampanel (Fycompa)	Tiagabine (Gabitril)
Ethosuximide (Zarontin)	Phenobarbitone	Topiramate (Topamax)
Gabapentin (Neurontin)	Phenytoin (Dilantin)	Vigabatrin (Sabril)
Lacosamide (Vimpat)	Pregabalin (Lyrica)	Zonisamide (Zonegran)
Lamotrigine (Lamictal)	Primidone (Mysoline)	
Levetiracetam (Keppra)	Rufinamide (Inovelon)	

For up-to-date information about medications, go to the [NPS website](#)



Taking other medications

Medications are known to interact with each other, including AED's and medications for other health conditions, over-the-counter drugs, illicit drugs and complementary therapies. Always ask your prescribing doctor or pharmacist about any possible interactions with medications, complementary therapies or supplements.

You can also call the **Medicines Line on 1300 888 763** and speak to a pharmacist who can also advise you about medication interactions.

Managing your epilepsy

It is vital that epilepsy be managed under the guidance of your doctor. Obtain clear instructions about how and when to take your medication and what side effects may occur. As general guidelines:

- Read the manufacturer's instructions
- Take your medication as prescribed. Changing dose or regime may provoke seizures and possibly a medical emergency
- Check what medications or preparations may interfere with your medication
- Know what to do if you miss taking your medication
- Avoid changing medication brands
- Ensure that you have a continuous supply of medication especially when travelling
- Store all tablets in original containers, clearly labelled and in a cool dry place out of reach of children
- Discuss with your doctor what effect alcohol may have on your medication and seizures or how your medication may affect contraception
- To avoid missing doses, take your medication at a regular time. If you are taking several medications, take them all at the same time—once, twice or three times a day as directed by your doctor.
- It can also be helpful to have a list of your medications with the name, dose and times you take them. This can be important if you ever go to hospital so there are no delays or errors in getting your medication whilst in hospital.

What you can do to help control seizures

Just taking medication is not always enough to control seizures. It is important for to be aware of other things that may help with seizure control. These include:

- avoiding known seizure triggers such as sleep deprivation and stress
- keeping healthy by eating a balanced diet and exercising regularly
- having regular check-ups with the doctor
- consulting your doctor if unwell or having unwanted symptoms
- keeping a seizure diary
- avoiding taking medications with grapefruit or Seville orange juice as these it may alter the absorption of some medications



For further information:

[Switching Brands Factsheet](#)

[Things you probably didn't know about medications](#)

[Managing your seizures](#)

[Self Management Factsheet](#)

[Travel Factsheet](#)

Reference:

Australian Government Department of Health. (2020) NPS Medicinewise: Managing Your Medicines. Accessed July 2020 <https://www.nps.org.au/consumers/managing-your-medicines>