

# Diagnosis



After a child has a seizure for the first time, they are generally taken to hospital or referred to a children's doctor or specialist for assessment.

Medical professionals who might be involved in the assessment include your child's paediatrician (children's doctor) and a paediatric neurologist with experience in the diagnosis and treatment of epilepsy. A paediatric neurologist is a doctor who specialises in brain, spine, and nervous system conditions and problems.

Your child's medical history, any eyewitness accounts, and medical tests are needed to make a diagnosis of epilepsy by a specialist. The doctor may also ask questions about the child's birth, other medical conditions and medications.

Medical tests that are used in the diagnosis of epilepsy include blood tests, EEG (electroencephalogram), CT scan (computerized tomography) and/or an MRI (magnetic resonance imaging).

Tests may be performed to:

- *Confirm the doctor's suspicion*

Based on the information they have from eyewitness accounts and their own observations, a doctor may suspect that your child potentially has a form of epilepsy. However, further testing and assessment is required to rule out other possibilities, such as syncope (fainting spells).

- *Determine the type of seizure or epilepsy*

Certain tests are capable of showing patterns of seizure activity, as well as where seizure activity is originating from in the brain.

Tests can also return without any abnormalities. This does not necessarily mean that your



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child does not have epilepsy. For example, the absence of abnormalities in an EEG (electroencephalogram) might simply mean that seizure activity was not occurring when the test was taken.

- *Determine the most appropriate treatment of your child's condition.*

The first line of treatment for epilepsy is [anti-seizure medication \(ASM\)](#) also known as anti-epileptic drugs AEDs. Prescribing ASMs for children is not taken lightly, and your doctor will discuss with you the benefits and risks of each potential treatment. The recommendation of your doctor will be based in part on the results of tests.

- *Determine the underlying cause of your child's epilepsy*

Some tests are capable of showing abnormalities in the brain that may be causing seizure activity. For example, neuroimaging scans like the [\(MRI magnetic resonance imaging\)](#) can identify structural abnormalities, injuries, and changes in blood flow associated with epilepsy, while an [EEG \(electroencephalogram\)](#) can identify the extent and location of abnormal electrical activity.

- *Monitor treatment of your child's epilepsy*

Tests can monitor how your child is responding to treatment, as well as manage potential risks and side effects. For example, blood tests are sometimes required when taking ASMs to ensure that particular drugs are within a therapeutic range, and to detect any adverse impacts.

- *Assess associated mental health or behavioural problems*

While there are higher rates of mental health and behavioural problems among people with epilepsy than the general population, most issues are manageable with the [right support](#). If you think that your child is experiencing mental health and behavioural problems, you can speak to your doctor about getting a referral to a suitable mental health professional, such as a child psychologist or psychiatrist, for further assessment and assistance.

Some types of epilepsy are called 'syndromes' because they exhibit a specific combination of symptoms. This depends on a range of factors including the seizure type, the results of tests and the response to medication. [Click here](#) to read more about epilepsy syndromes.

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