



epilepsy - the basics

It's as common as diabetes and a medical condition like asthma, so why is so little known about epilepsy? With as many as one in 130 people affected, epilepsy is the most common neurological condition in the UK. Many of you reading this will have epilepsy yourselves, or will have family members, friends, work colleagues or neighbours who have epilepsy. This leaflet aims to give you the basic facts - if you would like to know more, please contact Mersey Region Epilepsy Association on the number at the head of this leaflet.

Who has epilepsy?

Epilepsy can affect anyone at any time, although it is often diagnosed before the age of 20 or after 60. It can affect people of all ages, races, social classes and ability groups. Most people with epilepsy do not have the condition for the whole of their lives, particularly those whose epilepsy develops in childhood.
Unless they are having a seizure it is impossible to tell if people have epilepsy.

What is epilepsy?

Epilepsy is the tendency to have recurrent seizures, which tend to recur spontaneously. These seizures occur when there is a temporary disturbance in the brain and the signals it sends to the body become mixed up, rather like an electrical storm in the brain. What happens during a seizure depends in which part of the brain the 'storm' is occurring. Different seizure types are outlined later in this leaflet - people with epilepsy can have one type, or more than one type.
Up to 80% of people with epilepsy don't have seizures - they are controlled through taking medication.

What causes epilepsy?

For most people, there is no known cause for their epilepsy - this is referred to as idiopathic epilepsy. However, in some people with epilepsy, the cause is more certain, and the condition develops as a result of damage to the brain, for example, from injury, birth trauma, or stroke - this is known as symptomatic epilepsy.

All our brains have the capacity to produce a seizure in certain circumstances. Most brains won't do this unless encouraged, and so are said to have a 'high seizure threshold.' Others have a low threshold and people with idiopathic epilepsy have a lower resistance to seizures. In the case of epilepsy arising from injury or illness - symptomatic epilepsy - the existing seizure threshold may be lowered.
People are more than a medical condition – the seizures are epileptic, not the person.

How is epilepsy diagnosed?

Diagnosis is based on events and there is no one medical test that can 'prove' that a person has epilepsy. Tests such as an EEG (electroencephalogram) can pick up on abnormal electrical activity in the brain, but an EEG is not usually grounds enough alone for a diagnosis. These tests can, though, help to find out the seizure type, identify any underlying cause and indicate appropriate treatment.

Most cases of epilepsy are diagnosed through witnessed accounts of seizures and through descriptions of what happened before, during and after, by both the people suspected of having epilepsy, and those who were with them at the time. To be diagnosed with having epilepsy, the person must usually have recurrent seizures - one is not enough to constitute a diagnosis.

Once diagnosis has been confirmed, the person will be offered anti-epileptic medication which is designed to stop them from having seizures altogether, or reduce the amount of seizures they have.
One in 20 people have a seizure at some time in their lives. Everyone can have a seizure - people with epilepsy simply have a lower threshold.

RECOGNISING EPILEPSY

There are many different types of seizures, and only some involve losing consciousness. Some seizures, known as generalised seizures, affect the whole brain, while others, called partial seizures, affect only part of the brain.

Apart from the seizure types featured here, there are other, rarer types of seizures, including atonic, when someone suddenly goes limp and falls to the ground, but recovers soon afterwards; and myoclonic, a very brief seizure which involves a muscle jerk such as a nodding of the head or a jerk of the arm.

Generalised Seizures

Absence seizures

Common in children, an absence seizure usually shows itself in a blank stare, sometimes accompanied by slight twitching or blinking, which lasts only a few seconds. These seizures can occur many times a day.

How best to help: There is no action required during the seizure. Be patient, understanding and re-assuring, repeating what has been missed, if necessary.

Tonic-clonic seizures

These generalised seizures are most frequently associated with epilepsy. During a tonic-clonic seizure (formerly called 'grand mal') the people fall down, their bodies stiffen and start to convulse (to shake). Their faces may turn blue, they may bite their tongue, they may be incontinent. Tonic-clonic seizures usually last from between one to three minutes and afterwards, people generally feel headachy and tired. The seizures are 'self-righting' - they run their own course.

How best to help: The tonic-clonic seizure can look scary, but remember that the person experiencing the seizure is unconscious and cannot feel it. If you see someone having a tonic clonic seizure:

- Make sure there is nothing near that can hurt them.
- Cushion their head with something soft, such as a coat.
- You could loosen tight clothing around the neck - but take care as it could alarm someone who is semi-conscious.
- When the seizure is over, place the person in left side recovery position and stay with them - they may be drowsy or confused afterwards.
- DO NOT put anything in their mouth, try to restrain them during a seizure, or give them anything to eat or drink

Partial seizures

The most common form of partial seizure, in which only part of the brain is affected, is complex partial.

People experiencing complex partial seizures may act out of the ordinary, talking to themselves, pulling and picking at their clothes, or walking around in circles. The behaviour, during which time there may be some impairment of consciousness, usually lasts a few minutes. Sometimes, complex partial seizures can turn into tonic-clonic seizures (see below).

How best to help: Don't be judgmental - some people experiencing complex partial seizures are discriminated against because others do not recognise it as epilepsy, particularly as they may appear conscious, but do not respond. During the seizure, accompany the person and gently lead them away from danger. After a seizure, people can be unsure of themselves and where they are - be re-assuring.

Some people have seizures only in their sleep – this is called nocturnal epilepsy.

When to call an ambulance

There is no need to call an ambulance every time someone has a seizure. People with epilepsy can find themselves in casualty long after they have recovered. There are, however, certain conditions where calling for medical help would be necessary:

- If a seizure lasts a long time (over five minutes is a useful guide if you don't know the person having the seizure. If you do, and are familiar with their seizures, you will have a good idea of what is a 'usual' time for them).
- If one seizure stops and another starts, or if a person doesn't wake up after the seizure has stopped. Both of the above may be signs that status epilepticus is occurring - the continuation of an attack or cluster of attacks without recovering in between. If you know it's the person's first ever seizure, a visit to a hospital for investigations may be necessary.
- If injury has occurred during a seizure.

