

What is epilepsy?



Schweizerische Epilepsie-Liga  
Ligue Suisse contre l'Epilepsie  
Lega Svizzera contro l'Epilessia  
Swiss League Against Epilepsy

# Info

## Epilepsia



What are epileptic seizures  
and epilepsies?

Epilepsy can affect us all

### WHAT ARE EPILEPTIC SEIZURES AND EPILEPSIES?

Epileptic seizures occur when there is a temporary and excessive discharge of nerve cells in the brain. Epilepsies are repeated unprovoked epileptic seizures.

There are over ten types of epileptic seizure and considerably more forms of epilepsy, due in part to the fact that these epilepsies can manifest themselves in a combination of different seizure types. People with epilepsy generally have one form of epilepsy and one to three different types of seizure. The amount of time between the individual seizures varies considerably, from seconds to years or even decades.

The word epilepsy is derived from the Greek and means to be “taken”, “seized”, “attacked” or “overwhelmed”. Until the Middle Ages, epilepsies were sometimes called the “morbus sacer” or “sacred condition”, which set them apart from other conditions, a perception which continues to persist in some areas.

### Types of seizure

Many people have a very simplified view of what epileptic seizures involve, namely that someone experiencing a seizure will suddenly cry out, lose consciousness, perhaps bite their tongue and then fall to the floor. They will hold their breath and go blue, their body will stiffen and their arms and legs will convulse for a while before they fall exhausted into deep sleep-like state. Afterwards they might say they are worn out, have a headache, feel dizzy or have aching muscles. Sometimes they might urinate involuntarily as a result of the seizure.

Although the above is an accurate description of one common type of epileptic seizure (a bilateral tonic-clonic or “grand mal” seizure) this is just one of many seizure types and by no means the most commonplace.

**The various types of epileptic seizure look very different.** It is possible to have a seizure without crying out or becoming unconscious, without going stiff, biting your tongue and falling over, and without going blue and convulsing. The seizures can be so harmless that neither the person experiencing them nor non-professionals actually notice anything even when they observe them directly. For example, the only sign that someone is having an epileptic seizure could be a short period of inattentiveness lasting for five to ten seconds, or the brief twitching of an arm.

### A general definition

A general definition that applies to all types of seizure could be: epileptic seizures are sudden changes of a relatively brief duration to a person's consciousness, thinking, behaviour, memory, sensations or perceptions or a tensing of the muscles due to a temporary functional disturbance of nerve cells in the brain which emit excessive and reciprocally stimulating electrical discharges. Although this definition is correct, it is also far too long to remember and not useful in everyday life. **Thus a simplified way of describing epileptic seizures is that they are the result of a temporary functional disturbance of nerve cells, the effects of which depend on the usual role of the nerve cells involved.**

### Signs of an epileptic seizure

Any nerve cell or cluster of nerve cells in the brain could become “epileptic”, resulting in their normal function being disturbed or interrupted. If the nerve cells are responsible for the sense of smell, then there will be olfactory confusion; if they are usually responsible for sight then the person may perceive light flashes or other visual disturbances. If the nerve cells assist with memory, then learning will be impacted and the person may lose consciousness and be unable to remember the seizure and the events surrounding it.

### Seizures and epilepsy

The expression “epileptic seizures” is a collective description that can be used in conjunction with a multitude of very different diseases. Despite the investigative methods available nowadays, many people still have seizures for which there is no discernible cause. Moreover, not every person who has one or more epileptic seizures has epilepsy. For example, most people would have an epileptic seizure if they had an abscess on the brain or a severe enough head injury, if their brain was starved of oxygen, or if they took an overdose of certain drugs. Although these people might experience repeated seizures if the situation persisted or recurred, they do not have epilepsy.

Epilepsy is not usually diagnosed until the person has experienced two unprovoked seizures at least 24 hours apart. The seizures could still be due to the brain having been affected by, for example, a birth defect or an injury sustained in the past. The diagnosis of epilepsy also assumes that the cause of the epilepsy continues to persist between the seizures.

## What isn't correct as regards epileptic seizures and epilepsies?

In the case of a disease rather than a disorder it is possible to detect a specific cause of that specific disease. In this respect almost all epilepsies are not diseases, but rather a group of disorders with different causes that have a common feature which is the incidence of recurrent epileptic seizures. It is likely, however, that in the near future we will discover the specific causes of more and more forms of epilepsy.

In the meantime, good doctors are usually able to identify the relevant seizure type and epilepsy form and to treat their patients accordingly.

## A long history of prejudice

Although in recent decades the amount of expert knowledge about epilepsy has increased enormously, it is still one of several health disorders about which the general public harbours a great number of false perceptions and a great deal of prejudice. Thus there is still a lot of informing and awareness raising to be done.

It was actually the famous Greek doctor Hippocrates (460-375 BC) who recognized that epilepsies are caused by a malfunction in the brain, but it was not until the 19th century that the medical profession began to take this into consideration with regard to treatment and that the general public began – albeit very slowly – to understand epilepsies.

## TRUE AND FALSE STATEMENTS ABOUT EPILEPTIC SEIZURES AND EPILEPSIE

### False

An epileptic seizure is the same thing as epilepsy.

Epileptic seizures are always dramatic and obvious.

Epilepsy is a disease.

Epilepsy is a homogenous disease.

Epilepsies are hard to treat.

Epilepsy is a mental health disorder.

Epilepsy goes hand in hand with intellectual disability.

Epilepsy is an inherited disorder.

All “epileptics” are more or less the same.

### True

Epilepsy is not diagnosed unless the person has experienced two unprovoked seizures at least 24 hours apart, or if further seizures are likely for another reason (e.g. due to an epilepsy syndrome).

Some types of epileptic seizure are harmless or hardly noticeable.

To be precise, most epilepsies are not actually diseases but a group of somewhat similar disorders with different causes; there are few epilepsies with an identical and specifically recognized (molecular-genetic) cause.

There is no single form of epilepsy, but more than 30 different forms.

Around 60-70% of all epilepsies respond well to drug treatment (complete freedom from seizure or only very few seizures with good drug tolerability).

Like other neurological disorders, epilepsy is not a mental health disorder.

Most people with epilepsy do not have intellectual disabilities.

More than 90% of all epilepsies are not inherited from the point of view that if a parent has epilepsy that does not mean that their children will.

There are no typical and similar “epileptics”; people who have epilepsy are as different to each other as people with high blood pressure or diabetes.

Due to the bleak prospects for treatment at the time, in the latter half of the 19th century special institutions were created in many European countries for people with epilepsy, who were seen as the “most unfortunate of all unfortunate”. Thus people with epilepsy were treated in the same way as those suffering from mental health disorders, who faced a similar fate. Once an increasing number of effective treatments using drugs and surgery had been developed in the early 20th century, these “institutions for epileptics” were closed or turned into modern specialist neurological clinics or epilepsy centres.

## Epilepsy can affect us all

Five to ten percent of people will have an epileptic seizure at some point in their lives. Almost one percent of the world’s population will develop epilepsy. In Switzerland, approximately 70,000 to 80,000 people live with epilepsy, of whom some 15,000 to 20,000 are children.

### Epilepsy League – Diverse activities

The Epilepsy League has been researching epilepsy and helping and informing people since 1931. Its goal is to sustainably improve the daily lives and standing in society of those affected by epilepsy.

### Research

It promotes knowledge gathering in all areas of epilepsy.

### Help

Information and advice in German, English and French:

- For people with epilepsy and their relatives
- For professionals from a multitude of different areas

### Information

The Epilepsy League provides information to the public, raising awareness and thus aiding the social integration of people affected by epilepsy.

### Author:

Dr. med. Günter Krämer  
President of the Epilepsy League  
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### More flyers in English:

[www.epi.ch/en](http://www.epi.ch/en)

### Further information

In German, French, English and some in Italian:

### Swiss League Against Epilepsy

Seefeldstrasse 84  
8008 Zürich  
Tel. +41 43 488 67 77  
Fax +41 43 488 67 78  
[info@epi.ch](mailto:info@epi.ch)  
[www.epi.ch](http://www.epi.ch)  
IBAN CH35 0900 0000 8000 5415 8

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