

WHAT IS EPILEPSY?

An introduction

- Epilepsy is a common neurological condition that affects about 1 person in every 200.
- Epilepsy is a tendency to have recurrent seizures that originate in the brain.
- The brain is made up of billions of cells which process information from our senses, thoughts, emotions, memories and actions.
- Seizures are the result of a brief, temporary disruption to the usual activity of the brain.
- Such disruptions occur for a variety of reasons, not all of which can be identified.
- Reasons can include brain damage, scarring, chemical or hormonal imbalance, or tumours.
- Having a sensitive, vulnerable brain (low seizure threshold) is also a factor.
- There are many types of seizures – what happens before, during and after a seizure depends on which part of the brain is affected and how far the disruption spreads.
- Most seizures are over in a few minutes or less and the person recovers quickly.
- Epilepsy can affect anyone, of any age or race, either sex and from any walk of life.
- People with frequent seizures of any type may need constant supervision.
- However, the majority of people with epilepsy respond well to treatment and can get on with their lives.

SEIZURE TYPES

There are 3 broad categories.

Primary generalised seizures

The whole brain is affected by the disruption to its usual activity and consciousness is lost. Seizures in this category include:

- **Absences** – the person looks blank for a few seconds and may not respond when spoken to or realise they have had a seizure. This type of seizure can happen repeatedly and can be mistaken for daydreaming.
- **Tonic-clonic** – the person stiffens, loses consciousness, convulses and may fall. Incontinence may happen.
- **Tonic and atonic** seizures, or drop attacks – the person may stiffen and fall heavily or lose muscle tone and crumple to the ground.
- **Myoclonic** – rhythmic, shock-like muscle jerks that can affect the whole body and can be strong enough to throw the person to the ground.

Partial seizures

Only part of the brain is affected and consciousness may be altered but not lost. Seizures in this category include:

- **Simple partial seizure** – the person may experience unusual sensations and/or movement in one part of the body, e.g. tingling or twitching.
- **Complex partial seizures** – awareness is disturbed or lost and the person may experience unusual feelings. They may be unaware of their surroundings and unable to respond when spoken to and their behaviour may appear strange.

Secondarily generalised seizures

The disruption starts in one part of the brain and spreads to the whole brain.

Status epilepticus is a condition in which seizures persist for 30 minutes or more. It can occur with *all* types of seizure but with tonic clonic seizures it is a medical emergency requiring immediate medical treatment. If a tonic clonic seizure lasts more than 5 minutes or if a second seizure occurs before the person has recovered, call for medical help.

Some seizures don't fit into these categories and are known as unclassified seizures. Some seizures occur as part of a syndrome – a set of symptoms occurring together.

Living with seizures

- Experiences of epilepsy and of having seizures vary from person to person.
- Some people's seizures only happen at night.
- Some people have seizures that are so subtle they may go unnoticed by others.
- Some seizures may be mistaken for other conditions, e.g. alcohol or drug-related behaviour.
- Some people's seizures follow a particular pattern; others have seizures that occur at random.
- It's possible to have more than one type of seizure.
- Warnings or "auras" are simple partial seizures.
- Sometimes seizures can be triggered by a range of factors, e.g. lack of sleep, missed meals, response to stress or anxiety, fever, flashing lights.
- Most seizures are over in a few minutes or less and the person recovers quickly, but it's not unusual to feel sleepy or have a headache afterwards and sometimes it can take up to a few days to feel back to normal.
- Sometimes several people in different generations of the same family can have epilepsy.

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