



## Epilepsy Fact Sheet

Epilepsy is a common medical condition. It is estimated that 1 out of 12 people will have a seizure in their lifetime, and about 1 in 100 Canadians have epilepsy. Epilepsy can affect anyone, although it tends to be more common in children and the elderly. Epilepsy is still misunderstood. This makes things more difficult for the many people who live with it, and their family and friends. You can help by learning the facts.

### What is epilepsy?

Epilepsy is a neurological disorder characterized by the tendency to have recurrent seizures. Epilepsy is sometimes called a seizure disorder.

### What is a seizure?

An epileptic seizure is an abnormal burst of electrical activity arising within the brain. There are many different types of seizures. The kind of seizure a person has depends on which part and how much of the brain is affected by the electrical disturbance that produces seizures. Seizures are divided into two main categories: generalized seizures (absence, atonic, tonic-clonic, myoclonic) or partial seizures (simple and complex). People with epilepsy may experience more than one type of seizure.

### What does a seizure look like?

Seizures generally alter movement, sensation, behavior and/or awareness. A seizure may take many different forms including a blank stare, uncontrolled movements, altered awareness, odd sensations, or convulsions.

### Do people get any warning before a seizure?

Some people experience a sensation called an aura before a seizure starts. An aura is a feeling or experience that may warn the person that a more severe seizure may be about to begin. The aura is the start of a simple partial seizure before it spreads to other areas of the brain. Examples of an aura include a feeling of fear or sickness or an odd smell or taste.

### What should you do if someone has a seizure?

Stay calm and protect the person from injury. If someone is having a convulsive seizure (tonic-clonic or grand mal), put something soft underneath their head, loosen anything tight around the neck, move objects out of their way, and gently roll the person onto their side. Never restrain anyone during a seizure. If someone is having a seizure that involves a dazed state and/or purposeless movements (complex partial), stay with the person, move objects out of their way, and guide them away from danger. Afterwards, talk gently to comfort and reassure the person.

### Can a person swallow his tongue during a seizure?

No. This is physically impossible. Nothing should ever be put in a person's mouth during a seizure.

### What causes a person to develop epilepsy?

In about 70% of cases, no known cause can be found. Among the rest, it may be any one of a number of things that can make a difference in the way the brain works. For example, head injuries or lack of oxygen during birth may damage the delicate electrical system in the brain. Other causes may include stroke, problems in development of the brain before birth, brain tumors, genetic conditions (such as tuberous sclerosis), and infections like meningitis or encephalitis.

### Is epilepsy an inherited condition?

Some types of epilepsy are associated with genetic factors. However, most people with epilepsy usually have no family history of the condition.

### What kinds of tests are used in the evaluation of a person who may have epilepsy?

The main tool in diagnosing epilepsy is a careful medical history with as much information as possible about what the seizures looked like and what happened just before they began. A second major tool is an electroencephalograph (EEG). This is a test that records brain waves picked up by tiny wires (electrodes) placed on the scalp. The brain waves show special patterns which may help the doctor identify epilepsy. When the EEG does not show the cause for the epilepsy, CT or MRI scans may be helpful in some patients to look for growths, scars, or other physical conditions that may be causing the seizures.

### **How is epilepsy treated?**

The goal of epilepsy treatment is to prevent seizures. The treatments includes antiepileptic medication, surgery, vagus nerve stimulation and in children the ketogenic diet. Of these treatments, regular use of seizure-preventing drugs is the most common, and is the first to be tried. Different drugs control different types of seizures. A medication that helps one person may not be effective for someone else.

### **Is there a cure for epilepsy?**

There is no known cure for epilepsy. However, about 70% of people with epilepsy have their seizures controlled with medication. In some cases, epilepsy surgery offers the possibility of a reduction or elimination of the seizures. Depending on the type of epilepsy, some people will outgrow their epilepsy.

### **Can a person with epilepsy work?**

Yes. Most people with epilepsy can work and can have rewarding careers. Some may still have seizures, but can be valuable employees when placed in the right job or when accommodations are made. Each person's abilities should be considered individually.

### **Can a person with epilepsy drive?**

If a person's seizures are uncontrolled, driving is restricted. In BC, the Motor Vehicle Branch will normally allow driving if their doctor agrees that they have been seizure free for six months and that they take their medication consistently.

### **Can a person with epilepsy participate in sports or other recreation activities?**

Most sports and recreational activities are safe for people with epilepsy. However, this depends on the degree of seizure control, the type of activity, and what the doctor recommends.

### **Does epilepsy affect a person's emotional well-being?**

A person who has been diagnosed with epilepsy may experience a range of emotions such as anger, frustration, and depression. Concern for the future and negative responses from friends and family can leave a person feeling vulnerable and alone. Living with epilepsy can result in personal challenges, but it does not have to result in an inability to live a rewarding and full life.

### **Does epilepsy affect intelligence?**

People with epilepsy have the same range of intelligence as the general population. Some conditions that lower mental ability also cause epilepsy; but epilepsy itself does not diminish mental ability. Having epilepsy did not affect the mental ability of Alfred Nobel, Julius Caesar, Charles Dickens, Alexander the Great, and many other individuals who currently live successful and fulfilling lives with epilepsy.

### **Does a person with epilepsy have to avoid flashing lights?**

If a person is photosensitive, then lights flickering at a certain speed and brightness can trigger a seizure. People who are photosensitive have particular abnormalities on their EEG. Much more common seizure triggers include low seizure medication levels, lack of sleep, stress or anxiety, menstrual/hormonal changes, illness or fever, interactions from non-prescription medications, excessive alcohol consumption, or street drugs.

### **How can I help the BC Epilepsy Society make a difference for people with epilepsy?**

By volunteering time or financial support for our programs and services. Contact us for more information.

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**You can join the BC Epilepsy Society as a member and receive all the program and service benefits.**

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