

# **Epilepsy Fact Sheet**

# What is Epilepsy?

Epilepsy is a chronic neurological disorder characterized by recurrent and unprovoked seizures, caused by abnormal electrical activity in the brain. Seizures can manifest as various symptoms, including convulsions, altered consciousness, unusual sensations, or involuntary movements. Epilepsy affects people of all ages and can have a significant impact on an individual's quality of life and daily functioning.

# **Types of Seizures:**

Seizures can vary in type and severity. Common types include generalized seizures (affecting both sides of the brain) and focal seizures (affecting one area of the brain). Generalized seizures may cause loss of consciousness, convulsions, or muscle spasms, while focal seizures may result in localized symptoms like twitching or sensory changes.

## **Causes of Epilepsy:**

Epilepsy can be caused by a range of factors, including brain injuries (e.g., head trauma), strokes, brain tumors, infections (e.g., meningitis), genetic predisposition, developmental disorders, and sometimes the cause remains unknown (idiopathic epilepsy).

#### Treatment:

Treatment for epilepsy aims to control seizures and improve the individual's quality of life. This may involve antiepileptic medications, lifestyle modifications (e.g., sleep hygiene, stress management), ketogenic diet, epilepsy surgery, vagus nerve stimulation, or responsive neurostimulation.

#### Impact on Daily Life:

Epilepsy can have a significant impact on daily activities such as driving, employment, education, and social interactions. Individuals with epilepsy may face stigma and discrimination, which emphasizes the importance of raising awareness and fostering understanding within communities.

#### Prevalence:

In BC there are over 55,000 individuals that live with epilepsy and in Canada, approximately 300,000 individuals live with epilepsy. Globally, it is estimated that about 1 in 100 people has epilepsy. The prevalence of epilepsy varies across age groups and regions.

#### **Epilepsy and Children:**

Epilepsy can develop in childhood and can affect a child's development, learning, and behavior. Early diagnosis, appropriate treatment, and a supportive environment are crucial for managing epilepsy in children.



## **Epilepsy and Pregnancy:**

Women with epilepsy can have healthy pregnancies; however, careful planning and monitoring are necessary to manage medications and minimize risks to both the mother and baby. It's important to work closely with healthcare professionals during pregnancy.

## **Emergency Response for Seizures:**

During a seizure, ensuring safety is paramount. Remove objects that could cause injury, cushion the person's head, and time the duration of the seizure. Stay calm and call for medical assistance if the seizure lasts longer than usual or if it's a person's first seizure.

#### References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). American Psychiatric Publishing.

Engel, J., Jr. (1996). Introduction to temporal lobe epilepsy. Epilepsy Research, 26(1), 141-150.

Fisher, R. S., Acevedo, C., Arzimanoglou, A., Bogacz, A., Cross, J. H., Elger, C. E., ... & French, J. A. (2014). ILAE official report: A practical clinical definition of epilepsy. Epilepsia, 55(4), 475-482.

Hirtz, D., Thurman, D. J., Gwinn-Hardy, K., Mohamed, M., Chaudhuri, A. R., & Zalutsky, R. (2007). How common are the "common" neurologic disorders? Neurology, 68(5), 326-337.

National Institute of Neurological Disorders and Stroke. (n.d.). Epilepsy Information Page. https://www.ninds.nih.gov/Disorders/All-Disorders/Epilepsy-Information-Page