

# **EPILEPSY**

Epilepsy is a disorder of the brain that causes seizures; it is also known as a seizure disorder. Patients are diagnosed with epilepsy if they have seizures that were not caused by a known, reversible medical condition.

## WHAT IS A SEIZURE?

A person has a seizure as a result of a sudden surge of activity in the brain caused by chemical changes in nerve cells. Some seizures are barely noticeable; others can completely disable a person. There are several types of seizures, which might be characterized by:

- Rigidity or stiffness in the muscles.
- Convulsions (shaking).
- Loss of consciousness.
- Clenching of the jaw.
- Biting the tongue or cheek.
- Losing control of the bladder.
- Lack of awareness of one's surroundings (a person might appear to "zone out").
- Changes in emotions.
- Alteration of the senses (such as hallucination, or numbness).

## WHO DOES EPILEPSY AFFECT?

About 50 million people worldwide have epilepsy, according to the World Health Organization. It is the fourth-most-common neurological disease. While epilepsy can develop in any person at any age, new cases

most commonly show up in children and in those over age 55.

#### **CAUSES**

Epilepsy is not contagious. In about 6 out of 10 cases, doctors can't determine the cause of epilepsy. In other cases, it might have been caused by:

- Genetics: Those with a close relative who has epilepsy are at greater risk.
- A severe head injury.
- An infection of the brain such as meningitis, encephalitis or AIDS.
- A stroke that restricted oxygen to the brain.
- A brain tumor.
- Problems during pregnancy or at birth, such as a loss of oxygen during birth or low birth weight.

#### **TREATMENT**

In cases where the cause of epilepsy is known, treatment of that cause might make the seizures stop. In other cases, doctors often prescribe anticonvulsant or antiepileptic medication.

Surgery can help those who have structural brain problems caused by strokes or malformed blood vessels, for example. A surgeon might use a technique called brain mapping to determine which part of the brain is causing the seizures. That part of the brain is then removed, with the goal of curing the

condition. Surgery also might be done to cut nerve pathways that allow seizures to spread.

## **RESOURCES**

UK HealthCare has provided specialized care for epilepsy for more than two decades.

The Level 4 Comprehensive Epilepsy Center provides both outpatient services through the Kentucky Clinic and inpatient care at UK Albert B. Chandler Hospital. The services include epilepsy clinics, an active epilepsy surgery program and clinical trials in epilepsy. Patients have access to a broad range of advanced forms of seizure therapy unavailable elsewhere in the region. ukhealthcare.uky.edu/kni/epilepsy 859-323-5661

Epilepsy Foundation: www.epilepsy.com 800-332-1000