



## Epilepsy

### ◆ Definition ◆

According to the Epilepsy Foundation of America, epilepsy is a physical condition that occurs when there is a sudden, brief change in how the brain works. When brain cells are not working properly, a person's consciousness, movement, or actions may be altered for a short time. These physical changes are called epileptic seizures. Epilepsy is therefore sometimes called a seizure disorder. Epilepsy affects people in all nations and of all races.

Some people can experience a seizure and not have epilepsy. For example, many young children have convulsions from fevers. These febrile convulsions are one type of seizure. Other types of seizures not classified as epilepsy include those caused by an imbalance of body fluids or chemicals or by alcohol or drug withdrawal. A single seizure does not mean that the person has epilepsy.

### ◆ Incidence ◆

About two million Americans have epilepsy; of the 125,000 new cases that develop each year, up to 50% are in children and adolescents.

### ◆ Characteristics ◆

Although the symptoms listed below are not necessarily indicators of epilepsy, it is wise to consult a doctor if you or a member of your family experiences one or more of them:

- "Blackouts" or periods of confused memory;
- Episodes of staring or unexplained periods of unresponsiveness;
- Involuntary movement of arms and legs;

- "Fainting spells" with incontinence or followed by excessive fatigue; or
- Odd sounds, distorted perceptions, episodic feelings of fear that cannot be explained.

Seizures can be generalized, meaning that all brain cells are involved. One type of generalized seizure consists of a convulsion with a complete loss of consciousness. Another type looks like a brief period of fixed staring.

Seizures are partial when those brain cells not working properly are limited to one part of the brain. Such partial seizures may cause periods of "automatic behavior" and altered consciousness. This is typified by purposeful-looking behavior, such as buttoning or unbuttoning a shirt. Such behavior, however, is unconscious, may be repetitive, and is usually not recalled.

### ◆ Educational Implications ◆

Students with epilepsy or seizure disorders are eligible for special education and related services under the Individuals with Disabilities Education Act (IDEA). Epilepsy is classified as "other health impaired" and an Individualized Education Program (IEP) would be developed to specify appropriate services. Some students may have additional conditions such as learning disabilities along with the seizure disorders.

Seizures may interfere with the child's ability to learn. If the student has the type of seizure characterized by a brief period of fixed staring, he or she may be missing parts of what the teacher is saying. It is important that the teacher observe and document these episodes and report them promptly to parents and to school nurses.

Depending on the type of seizure or how often they occur, some children may need additional assistance to help them keep up with classmates. Assistance can include adaptations in classroom instruction, first aid instruction on seizure management to the student's teachers, and counseling, all of which should be written in the IEP.

It is important that the teachers and school staff are informed about the child's condition, possible effects of medication, and what to do in case a seizure occurs at school. Most parents find that a friendly conversation with the teacher(s) at the beginning of the school year is the best way to handle the situation. Even if a child has seizures that are largely controlled by medication, it is still best to notify the school staff about the condition.

School personnel and the family should work together to monitor the effectiveness of medication as well as any side effects. If a child's physical or intellectual skills seem to change, it is important to tell the doctor. There may also be associated hearing or perception problems caused by the brain changes. Written observations of both the family and school staff will be helpful in discussions with the child's doctor.

Children and youth with epilepsy must also deal with the psychological and social aspects of the condition. These include public misperceptions and fear of seizures, uncertain occurrence, loss of self control during the seizure episode, and compliance with medications. To help children feel more confident about themselves and accept their epilepsy, the school can assist by providing epilepsy education programs for staff and students, including information on seizure recognition and first aid.

Students can benefit the most when both the family and school are working together. There are many materials available for families and teachers so that they can understand how to work most effectively as a team.

## ◆ Resources ◆

Epilepsy Foundation of America. (n.d.). *Epilepsy: Questions and answers about seizure disorders*. Landover, MD: Author. (See address below.)

Freeman, J.M., Vining, E.P.G., & Pillas, D.J. (2002). *Seizures and epilepsy in childhood: A guide for parents* (3<sup>rd</sup> ed.). Baltimore, MD: Johns Hopkins University Press. (Telephone: 800-537-5487. Web: [www.press.jhu.edu/press/index.htm](http://www.press.jhu.edu/press/index.htm))

Lechtenberg, R. (1999). *Epilepsy and the family: A new guide* (2<sup>nd</sup> ed.). Cambridge, MA: Harvard University Press. (Telephone: 800-448-2242. Web: [www.hup.harvard.edu](http://www.hup.harvard.edu))

## ◆ Organizations ◆

Epilepsy Foundation—National Office  
4351 Garden City Drive, Suite 406  
Landover, MD 20785  
301-459-3700; 800-332-1000  
301-577-0100, for Publications  
E-Mail: [postmaster@efa.org](mailto:postmaster@efa.org)  
Web: [www.efa.org](http://www.efa.org)

National Institute of Neurological Disorders and Stroke (NINDS)  
National Institutes of Health  
Building 31, Room 8A06  
31 Center Drive, MSC2540  
Bethesda, MD 20892-2540  
301-496-5751; 800-352-9424  
Web: [www.ninds.nih.gov/](http://www.ninds.nih.gov/)



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