

# Youth and Epilepsy

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## What is Epilepsy?

Epilepsy is a brain disorder in which electrical signals are disrupted. This disruption leads to seizures. Seizures may range in severity from brief changes in a person's body movement or awareness to violent convulsions.

## What are the Types of Seizures?

There are two main types of seizures: partial seizures and generalized seizures. Partial seizures are divided into three categories. These are:

- 1. Simple Partial Seizures—lasting for a few seconds, they affect only a small part of the brain, and they do not affect consciousness.
- 2. Complex Partial Seizures—person may stop speaking, have repetitive movements, or act strangely; a larger area of the brain is affected.
- 3. Secondarily Generalized Seizures—these seizures are type 1 and 2 partial seizures that spread throughout the brain. They cause a loss of consciousness and shaking of the

**Generalized seizures** are divided into two categories. These are:

- 1. Generalized Tonic-Clonic Seizures—also known as grand-mal seizures, they cause rapid shaking of the limbs for one to two minutes followed by unconsciousness. It may take several hours to recover from this type of seizure.
- 2. Absence Seizures—also known as petit mal seizures, these occur mostly in children and include staring and changes in consciousness.

## What Causes Epilepsy?

In many epilepsy cases, the cause is unknown; but some epilepsy cases may be caused from head injuries, meningitis and other brain infections, brain tumors, surgery, or abscess, stroke, hardening of the arteries, Alzheimer's disease, and other degenerative brain diseases. A family history of epilepsy also puts one at a greater risk for having the disease.

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#### What Triggers a Seizure?

The actual cause of a seizure often is a mystery. However, there are some things that seem to trigger seizures. These include stress, medications, infection, sleep deprivation, alcohol and other drugs, addictive drug withdrawal, flashing lights including strobes, fevers, starvation, and dehydration.

#### What To Do When Someone Has a Seizure?

Depending on the type of seizure you will need to do some or all of these things:

- 1. Don't restrain the individual. This may cause him or her to become unconsciously aggressive and harm themselves or others.
- 2. If it is a grand-mal seizure or secondarily generalized seizure, try to find something padded to put under the person's head, such as a pillow, jacket, or sweatshirt.
- 3. Remove anything from the area that may be harmful to the person having a seizure.
- 4. Do not put anything in the epileptic's mouth to keep the person from swallowing the tongue. Epileptics will not swallow their tongue but may choke if something is put in their mouth.
- 5. Reassure others that this episode will only last a few minutes and that the individual will be okay.
- 6. Watch for choking as vomiting sometimes occurs during and after a seizure.
- 7. Once the person begins to regain consciousness, reassure him or her that everything is going to be okay.
- 8. Contact the parents or guardians of the member and make a plan about medical treatment.

### **Important Issues for Extension Educators** and 4-H Leaders to Consider:

1. Have contact information for parents or guardians and the member's doctor in accessible places. An example of this would be behind the child's nametag and in the medical forms box which should be stored in the main office at 4-H events. This form should include information such as what kinds of medication the child is taking, allergies, if any adaptive devices are used, and other health conditions.

- 2. It is a good idea to visit with the epileptic and his or her family about the member's condition before a seizure occurs. Questions that can be asked include: "What is a typical seizure like?", "Should I call an ambulance?", and "What are some of the things that trigger your seizures?"
- 3. Epileptics can usually participate in all activities. However, some activities require added caution. Epileptics who are participating in swimming or other water activities need to be closely monitored because if they have a seizure in or near the water they could easily drown. NEVER participate in water activities without at least one certified lifeguard on duty.
- 4. When having a dance or similar activity, do not activate flashing or strobe lights as these can trigger seizures.

#### **For More Information Contact:**

**Epilepsy Foundation** 4351 Garden City Drive Landover, MD 20785-7223 Phone: (800) 332-1000

Web site: www.epilepsyfoundation.org (Web site active as of May 6, 2005)

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