

What is a seizure?

A seizure is a sudden change in awareness, movement or behavior. It can be very scary. They look different for each child. The child may:

- Shake all or part of the body.
- Have a blank stare.
- Fall to the ground.
- Have brief and sudden muscle spasms.
- Do things over and over again such as blink their eyes, pull at clothes or smack their lips.

What causes a seizure?

A seizure is caused by a sudden burst of electrical activity in the brain. It is like a car that backfires or a computer that suddenly stops working.

Provoked seizures are caused by something that affects the brain for only a short time. Some examples are:

- **Fever.** These are called **febrile seizures**. They may happen with a sudden fever. They are most common in young children between 6 months and 3 years. About 1 in every 25 children will have at least one febrile seizure. About one third of these children will have more febrile seizures until they outgrow them.
- Low blood sugar.
- Brain infection or injury.
- Taking a poison or other toxin.

Unprovoked seizures are caused by a change in the electrical activity of the brain. The cause may be genetic. This means it runs in the family. They may result from a prior injury to the brain. They may also be from a difference in the way the brain formed early in your child's life. Sometimes the cause is not known.

What tests may be done?

- **EEG** (Electroencephalogram). A test that records the electrical activity in the brain.
- **MRI** (Magnetic Resonance Imaging). An MRI takes very clear pictures of the brain. It can sometimes find very small problems in the brain.
- **Blood tests.** These check for infections or other problems.
- **Spinal tap.** A test of the spinal fluid to look for infection. Also called a lumbar puncture (LP).

Will my child have another seizure?

It is hard to tell after one seizure if your child will have more. For a child who has one, short, full body shaking seizure and has normal development and a normal exam:

- **If the EEG is normal.** The child has about a 30% chance of having a second seizure.
- **If the EEG is not normal.** The child has about a 50 to 70% chance of having a second seizure.
- A child with developmental problems, an abnormal MRI or abnormal exam has a higher risk of having more seizures.

How is a seizure treated?

Knowing what to do and how to keep your child safe during a seizure is very important. Teaching sheet #1994 - **Caring for Your Child During a Seizure (#1994)** has this information. There is also a teaching sheet for Febrile Seizures (#1469).

Medicine

Many children do not need medicine after only one seizure. Medicine will not cure seizures. Medicine may be used to decrease the chance of another seizure. Sometimes they are not used until there are 2 or more seizures. Your health care provider will talk with you if medicines might help your child.

If medicines are used they are:

- Given to keep your child seizure free for 1 to 2 years. Sometimes your child will take them until they are old enough to be at lower risk for having seizures.
- Prescribed based on your child's type of seizure.
- Checked by blood tests to see how much medicine is in the blood. The dose of the medicine may need to be changed to limit the side effects and the number of seizures.

Where can I get more information?

American Epilepsy Society
www.aesnet.org

Epilepsy Foundation of America
www.efa.org

ALERT: Call your child's doctor, nurse or clinic if you have any questions or concerns or if your child:

- Is having more seizures.
- Is not able to take the medicines.
- Has special health care needs that are not covered by this information.

This sheet was created to help you care for your child or family member. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment and follow-up.