Seizure First Aid

Tonic Clonic Seizure First Aid

Sometimes called “Grand Mal,” this is a convulsive seizure with loss of consciousness, muscle stiffening, falling, and jerking motions.

- Stay calm and do not restrain the person having a seizure or put anything in their mouth
- Cushion their head with something soft
- Remove glasses and loosen tight clothing
- Time the seizure
- After the seizure ends, offer reassurance

Focal Impaired Awareness Seizure First Aid

These are non-convulsive seizures where the person shows signs of confusion, unresponsiveness, or inappropriate behavior. Behavior may include losing awareness or appearing to be intoxicated from drugs or alcohol.

- Stay calm and do not restrain the person
- Gently direct away from any hazards
- Time the seizure
- After the seizure ends, offer reassurance

When To Call 911

You know, or believe it to be, the person’s first seizure
If the seizure lasts more than 5 minutes
You feel uncomfortable dealing with the situation

This information is made available as a guide only on the understanding that the Epilepsy Foundation of Minnesota shall have no liability by reason of any person using or relying on this information.
There are over three million reasons for this pamphlet. That’s how many Americans have epilepsy (seizure disorders). And locally, more than 60,000 people in Minnesota and eastern North Dakota are living with epilepsy.

You may see several seizures a day and not even know it. People with epilepsy look like everyone else except when they have a seizure.

You might not recognize what you are seeing and not know that the actions or movements are being caused by a temporary medical condition. This might lead to actions that you or the person with epilepsy might later regret. The following information can better prepare you to recognize and respond to seizures.

WHAT IS EPILEPSY?

Epilepsy is a common neurological condition. It is the general term for more than 20 different types of seizure disorders produced by brief, temporary changes in the normal functioning of the brain’s electrical system.

These brief malfunctions mean that more than the usual amount of electrical energy passes between cells. The sudden overload may stay in one small area of the brain, or it may affect the whole system.

Of course, you can’t see what’s happening inside a person’s brain; however, you can see the unusual body movements, the effects on consciousness and the changed behavior that the malfunctioning areas are producing. These changes are what we call seizures.

A single seizure may be caused by a number of health conditions. In addition, about one person in 100 has recurring seizures, known as epilepsy. Two out of four new cases begin in childhood. Epilepsy in adults may be the result of a head injury – often from auto accidents – or may date from their childhood years. Epilepsy is not contagious at any age.

Recognition of epilepsy and knowledge of appropriate seizure response is important because it is easy to mistake seizures for other conditions. For example, generalized tonic clonic seizures may look like a heart attack, and CPR techniques may be used when they are not necessary. A period of automatic behavior may be interpreted as being drunk or high on illegal drugs. The fact that a person may have Phenytoin (an anti-epileptic drug) with him/her may add confusion to the situation and the person responding.

LAW ENFORCEMENT OFFICERS: EPILEPSY AND DRUGS

Despite medical progress, epilepsy cannot be cured in the same sense that an infection can be cured.

Seizure control is achieved through regular, daily use of anti-epileptic drugs called anticonvulsants. Doses may have to be taken up to four times a day and people with epilepsy therefore usually carry medication on-hand. To miss a scheduled dose is to risk a seizure. Many medications are used in epilepsy treatment and more than one drug may be prescribed.

If a law enforcement officer has any doubts about the legality of a person’s possession of medication, the physician who prescribed the drug (or the pharmacy which dispensed it) should be contacted without delay. Depriving a person with epilepsy of access to his/her medication is putting their health – even their life – at risk.

When medication is taken away, for even as little as several hours, the following may occur:

• A convulsive seizure with subsequent injury due to falling on cement floors or in a confined area.

• A series of convulsive seizures called status epilepticus, in which the convulsions continue nonstop, or are followed by coma or a subsequent series of seizures. These are life threatening and the mortality risk is high unless prompt treatment at a properly equipped medical facility is available.

• Episodes of automatic behavior, known as complex partial seizures, in which the person is unaware of where he/she is or what he/her circumstances are, injures himself in unconscious efforts to escape, or is injured in struggles with law enforcement personnel. A person having this type of seizure is an automatic pilot as far as his/her actions are concerned. Efforts to restrain can produce a fighting reaction which he/she cannot control.

TYPES OF SEIZURES

Focal (partial) seizures

This type of seizure involves only part of the brain, and has two different types:

Simple seizures are sometimes called aura. During these seizures, there may be changes in body movements, emotions, or sensations such as smelling things that are not there. It may last a few seconds to three minutes.

Complex seizures produce involuntary movements or activities with no purpose such as lip smacking, hand wringing, or wandering, with an unawareness of surroundings or the ability to respond.

Generalized seizures

This type of seizure affects the entire brain. The two most common generalized seizures are:

Generalized tonic clonic seizures, formally called grand mal seizures, are what most people generally think of when they hear the word “epilepsy.” In this seizure type, the person undergoes complete loss of consciousness and muscle spasms, which usually last two to five minutes.

Absence seizures take the form of a blank stare lasting only a few seconds.

Since these seizure disorders are so different in their effects, they require different kinds of action. Some require no action at all. The fold-out section of this pamphlet describes specific seizures in detail, and how to respond to each type. It’s been produced in this form to encourage posting on bulletin boards or other places where it can be easily seen.

RESPONDING TO SEIZURES IN SPECIAL CIRCUMSTANCES

Although the fold-out chart inside this pamphlet gives information on seizure first aid, there are circumstances in which additional steps should be taken.

Seizure in water

If a seizure occurs in water, the person should be supported with the head tilted and removed from the water as quickly as possible with the head in this position. On dry land, he/she should be examined and if they are not breathing, an artificial respiration should begin at once. Anyone who has a seizure in water should be taken to the emergency room for a careful medical checkup, even if he/she appears to be fully recovered afterwards. Heart or lung damage from ingestion of water is a possible hazard in such cases.

Seizure on a bus

Ease the person across a double or triple seat. Turn him/her on their side, and follow the same steps as indicated above. If he/she wishes to do so, there is no reason why a person who has fully recovered from a seizure cannot stay on the bus until he/she arrives to their destination.

COULD IT BE EPILEPSY?

Only a physician can say whether or not a person has epilepsy. Many people miss the subtle signs of the condition and therefore also miss the opportunity for early diagnosis and treatment. The symptoms listed below are not necessarily indications of epilepsy, but may be caused by other, unrelated conditions. However, if one or more is present, a medical check-up is recommended.

• Periods of blackout or confused memory.

• Occasional “fainting spells” in which bladdar or bowel control is lost, followed by extreme fatigue.

• Episodes of blank staring in children; brief periods when there’s no response to questions or instructions.

• Sudden falls in a child for no apparent reason.

• Episodes of blinking or chewing at inappropriate times.

• A convulsion, with or without fever.

• Clusters of swift jerking movements in babies.

24/7 SUPPORT & RESOURCES

Contact us anytime to:

• Answer questions about driving, employment, or personal safety.

• Train a school or workplace about seizure first aid.

• Get personalized educational materials and instructions.

Call 800.779.0777 or info@efmn.org during business hours or 800.332.1000 (an Español: 866.748.8008) after hours.

EPILEPSY RECOGNITION & RESPONSE
<table>
<thead>
<tr>
<th>SEIZURE TYPE</th>
<th>WHAT IT LOOKS LIKE</th>
<th>WHAT IT IS NOT</th>
<th>WHAT TO DO</th>
<th>WHAT NOT TO DO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generalized Tonic Clonic</strong></td>
<td>Sudden cry, fall, rigidity, followed by muscle jerks, shallow breathing, bluish skin, possible loss of bladder or bowel control, usually last a couple of minutes. Normal breathing then starts again. There may be some confusion and/or fatigue, followed by a return to full consciousness.</td>
<td>Heart attack</td>
<td>Look for medical identification. Protect from nearby hazards. Loosen ties or shirt collars. Protect from head injury. Turn on side to keep airway clear unless injury exists. Reassure as consciousness returns. If single seizure lasted less than five minutes, ask if hospital evaluation is wanted. If multiple seizures, or if one seizure lasts longer than five minutes, call an ambulance. If person is pregnant, injured or diabetic call for aid at once.</td>
<td>Don't put any hard implement in the mouth. Don't try to hold tongue. Don't try to give liquids during or just after seizure. Don't use artificial respiration unless breathing is absent after muscle jerks subside, or unless water has been inhaled. Don't restrain.</td>
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<tr>
<td>(also called Grand Mal)</td>
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<tr>
<td><strong>Absence</strong></td>
<td>A blank stare, beginning and ending abruptly, lasting only a few seconds, most common in children. May be accompanied by rapid blinking, some chewing movements of the mouth. Child or adult is unaware of what's going on during the seizure, but quickly returns to full awareness once it has stopped. May result in learning difficulties if not recognized and treated.</td>
<td>Daydreaming</td>
<td>No first aid necessary, but if this is the first observation of the seizure(s), medical evaluation should be recommended.</td>
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<tr>
<td>(also called Petit Mal)</td>
<td></td>
<td>Lack of attention</td>
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<td></td>
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<td>Deliberate ignoring of adult instructions</td>
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<tr>
<td><strong>Focal Onset Aware</strong></td>
<td>Jerking may begin in one area of body, arm leg or face. The jerking can't be stopped but the patient stays awake and aware. Jerking may proceed from one area of the body to another and sometimes spreads to become a convulsive seizure. Partial sensory seizures may not be obvious to an onlooker. Patient experiences a distorted environment. May see or hear things that aren't there, may feel unexplained fear or sadness, anger or joy. May have nausea, experience odd smells, and have a generally “funny” feeling in the stomach.</td>
<td>Acting out</td>
<td>No response/first aid is necessary unless seizure becomes convulsive, then first aid as above. No immediate action needed other than reassurance and emotional support. Medical evaluation should be recommended.</td>
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<tr>
<td>(also called Simple Partial)</td>
<td></td>
<td>Bizarre behavior</td>
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<td></td>
<td></td>
<td>Hysteria</td>
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<td></td>
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<td>Mental illness</td>
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<td>Psychosomatic illness</td>
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<td></td>
<td></td>
<td>Para psychological or mystical experience</td>
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<tr>
<td><strong>Focal Onset Impaired Awareness</strong></td>
<td>Usually starts with a blank stare, followed by chewing, followed by random activity. Person appears unaware of surroundings, may seem dazed and mumble. Unresponsive actions, clumsy, not directed. May pick at clothing, puck up objects, may attempt to take off clothes off. May run, appear afraid, may struggle orfail at restraint. Once pattern is established, same set of actions usually occur with each seizure. Lasts a few minutes, but post-seizure confusion can last substantially longer. No memory of what happened during seizure period.</td>
<td>Drunkenness</td>
<td>Speak calmly and reassuringly to patient and others. Guide gently away from obvious hazards. Stay with the person until completely aware of environment.</td>
<td>Don't grab hold unless sudden danger (such as cliff edge or an approaching car threatsers). Don't try to restrain. Don’t shout. Don’t expect verbal instructions to be obeyed.</td>
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<tr>
<td>(also called Complex Partial)</td>
<td></td>
<td>Intoxication on drugs</td>
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<td></td>
<td></td>
<td>Mental illness</td>
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<td></td>
<td></td>
<td>Disorderly conduct</td>
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<tr>
<td><strong>Atonic Seizures</strong></td>
<td>A child or adult suddenly collapses and falls. After 10 seconds to a minute he/she recovers, regains consciousness, and can stand and walk again.</td>
<td>Clumsiness</td>
<td>No response/first aid is needed (unless he/she hurts themselves during the fall), a child should be given a thorough medical evaluation.</td>
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<tr>
<td>(also called Drop Attacks)</td>
<td></td>
<td>Normal childhood “stage”</td>
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<td></td>
<td></td>
<td>In a child, lack of good walking skills</td>
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<td>In an adult, drunkenness</td>
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<td></td>
<td></td>
<td>Acute illness</td>
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<tr>
<td><strong>Myoclonic Seizures</strong></td>
<td>Sudden brief, massive muscle jerks that may involve the whole body or parts of the body. May cause person to spill what they were holding or fall off a chair.</td>
<td>Clumsiness</td>
<td>No response/first aid is needed, but should be given a thorough medical evaluation.</td>
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<td></td>
<td>Poor coordination</td>
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<tr>
<td><strong>Infantile Spasms</strong></td>
<td>These are clusters of quick, sudden movements that start between three months and two years of age. If a child is sitting up, the head will fall forward and the arms will flex forward. If lying down, the knees will be drawn up with arms and head flexed forward as if the baby is reaching for support.</td>
<td>Normal movements of the baby</td>
<td>No response/first aid, but doctor should be consulted.</td>
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<td></td>
<td></td>
<td>Colic</td>
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Epilepsy in Children:
The Teacher’s Role
Epilepsy and School

Epilepsy is a disorder of the brain characterized by seizures that recur, caused by a temporary change in the way brain cells control awareness and body movements.

Types of seizures:

- Convulsions or sudden falls
- Brief but frequent episodes of blank staring
- Distortions of the child’s environment which are invisible to everyone else
- Dazed, almost trance-like behavior during which the child’s consciousness is suspended and memory does not function

Children who have seizures may run into problems at school, but this can be managed by informed school staff. Problems may include: isolation from other students, low self-esteem, and a lower level of achievement.

Founded in 1954, the Epilepsy Foundation of Minnesota (EFMN) is a non-profit organization that offers programs and services to educate, connect, and empower people affected by seizures.

Together we can...

**EDUCATE** the community about seizures to reduce the stigma surrounding epilepsy.

**CONNECT** people with epilepsy to others, and to resources.

**EMPOWER** people living with epilepsy to reach their full potential.

**Our mission**

EFMN leads the fight to overcome the challenges of living with epilepsy and to accelerate therapies to stop seizures, find cures, and save lives.

**Our vision**

A world where people with seizures realize their full potential.

**Epilepsy and School**

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Who Has Epilepsy?
Approximately 3 million Americans have epilepsy, and over 200,000 new cases are diagnosed in the U.S. each year. One in 10 people will have a seizure in their lifetime, and 60,000 Minnesotans have epilepsy.

Epilepsy doesn’t discriminate. It affects children and adults, men and women, and people of all races, religions, ethnic backgrounds, and social classes. While epilepsy is most often diagnosed either in childhood or after the age of 65, it can occur at any age.

What Causes Epilepsy?
More than half the time, the cause of epilepsy is unknown. When a cause can be determined, it’s most often because of:

- Infections and maternal injury
- Stroke
- Brain tumor
- Genetic factors
- Head trauma
Emergency Management

An average convulsive seizure in a child who has epilepsy is NOT a medical emergency unless:

- It is the child’s first known seizure (look for medical ID bracelets)
- Consciousness does not return after the seizure ends
- A second seizure begins shortly after the first one without regaining consciousness in between
- The seizure shows no sign of ending after 5 minutes
- The child is diabetic
- The seizure happens in water
- If head trauma occurs during seizure

If there is a history of prolonged seizures, a child’s physician may prescribe “rescue medicine” that a trained adult can use (which is stated in a seizure action plan).

Helping All Children in the Classroom

Below are resources to provide children to minimize fear and anxiety:

- Factual, age-appropriate information
- Reassurance from adults that the seizure poses no danger to them or to the child with epilepsy
- Alleviate fear of the event by having a discussion about how to support the student with epilepsy and answer any questions (ask the student who had the seizure if they want to be included)

The Epilepsy Foundation of Minnesota offers free seizure training for students, school staff, and parents.
Classroom talking points

• What happened is called a seizure
• It happened because for a minute the child’s brain sent mixed messages to the rest of their body. Now that it’s over, their brain and body are working properly again
• Seizures are part of a health condition called epilepsy
• Children who have epilepsy take medicine to prevent seizures but sometimes one happens anyway
• Seizures usually stop by themselves but it’s good to know how we can help keep the student safe
• If convulsions happen, emphasize that the child is not “crazy”
• Epilepsy is not contagious
• If a student has a seizure, we can be helpful classmates by being kind and accepting

If the Child Who Had the Seizure is Present

• Can you tell us what it feels like when you have a seizure? How do you feel after you have a seizure?
• Can anyone tell us how they think they would feel if they had a seizure? What would they want other children to do?
• What is the most important part of helping someone who’s having a seizure? (Keep them safe and be a friend when it’s over)
SEIZURE RECOGNITION & COMMUNICATION

When symptoms of a seizure disorder are frequent episodes of blank staring and unresponsiveness, the teacher is often the first adult to notice. Here are the most common signs of possible seizure activity:

- Brief staring spells in which the child does not respond to direct attempts to gain attention
- Periods of confusion
- Pattern of the need to repeat directions
- Drop in achievement level
- Head-dropping
- Sudden loss of muscle tone
- Episodes of rapid blinking or the eyes rolling upwards
- Inappropriate movements of the mouth or face, accompanied by a blank expression
- Aimless, dazed behavior, including walking or repetitive movements that seem inappropriate to the environment
- Involuntary jerking of an arm or leg

If a pattern is observed, it should be reported to the child’s parents. Suggest they speak to their doctor as it seems to be interfering with the child’s performance, but do not offer a diagnosis. Documentation can also be helpful to a doctor (observation forms available at efmn.org). If seizures are known, here are some questions to ask parents:

- What do the seizures look like and how long do they usually last?
- What, if anything, triggers them?
- When are seizures considered an emergency?
POSSIBLE SIDE EFFECTS OF SEIZURE MEDICATIONS

- Unusual fatigue
- Lethargy
- Clumsiness
- Nausea
- Unusual restlessness
- Memory issues
- Irritability
- Behavior changes

Classroom Behavior

Behavioral problems in the classroom can occur for several different reasons. Identifying the source is the first step:

- Seizure activity itself
- Medication side effects
- Child’s own anxiety and low self esteem
- Social challenges
- Parental overprotection or overindulgence. Children should be encouraged to participate in school activities (supervision may be needed during gym or swimming—refer to your school’s policy).
Additional Resources
For information on seizure first aid, seizure types, treatment options, driving, SUDEP, safety tips, additional resources, and more, please visit the following:
  • efmn.org
  • epilepsy.com

24/7 Support
Call 800.779.0777 or info@efmn.org during business hours or 800.332.1000 (en Español: 866.748.8008) after hours with any questions or concerns.
<table>
<thead>
<tr>
<th>GENERIC</th>
<th>BRAND NAME</th>
<th>COMMON USES</th>
<th>POSSIBLE SIDE EFFECTS (the majority of individuals do not experience side effects)</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetazolamide</td>
<td>Diamox® Sequels®</td>
<td>Various seizure types</td>
<td>Appetite loss, frequent urination, drowsiness, confusion, numbness of extremities, kidney stones</td>
</tr>
<tr>
<td>brivaracetam</td>
<td>Briviact®</td>
<td>Focal seizures</td>
<td>Dizziness, sleepiness, fatigue, mood changes</td>
</tr>
<tr>
<td>carbamazepine</td>
<td>Tegretol®, Carbatrol®, Tegretol® XR, Equetro®</td>
<td>Focal and generalized seizures</td>
<td>Dizziness, drowsiness, blurred or double vision, nausea, skin rashes, abnormal blood counts (rare)</td>
</tr>
<tr>
<td>clobazam</td>
<td>Onfi™</td>
<td>Various seizure types</td>
<td>Fatigue, lethargy, insomnia, unsteadiness, changes in behavior, changes in appetite</td>
</tr>
<tr>
<td>clonazepam</td>
<td>Klonopin®</td>
<td>Various seizure types</td>
<td>Drowsiness, sleepiness, fatigue, poor coordination, unsteadiness, behavior changes</td>
</tr>
<tr>
<td>clorazepate</td>
<td>Tranxene®</td>
<td>Various seizure types</td>
<td>Drowsiness, sleepiness, fatigue, poor coordination, unsteadiness, behavior changes</td>
</tr>
<tr>
<td>repository corticotropin injection</td>
<td>HP Acthar® Gel</td>
<td>Epileptic spasms</td>
<td>Insomnia, weight gain, irritability, fluid retention, increased appetite</td>
</tr>
<tr>
<td>diazepam</td>
<td>Diastat Acudial™, Valium®</td>
<td>Various seizure types (not for daily, long-term use, but to stop episodes of prolonged or cluster seizures)</td>
<td>Drowsiness, sleepiness, fatigue, poor coordination, unsteadiness, behavior changes</td>
</tr>
<tr>
<td>divalproex sodium</td>
<td>Depakote®, Depakote ER®, Depakote® sprinkles</td>
<td>Various seizure types</td>
<td>Upset stomach, altered bleeding time, liver toxicity, hair loss, weight gain, tremor</td>
</tr>
<tr>
<td>eslicarbazepine acetate</td>
<td>Aptiom®</td>
<td>Focal seizures</td>
<td>Dizziness, drowsiness, nausea, headache, double-vision, vomiting, fatigue, and loss of coordination, rash</td>
</tr>
<tr>
<td>ethosuximide</td>
<td>Zarontin®</td>
<td>Absence seizures</td>
<td>Appetite loss, nausea, drowsiness, headache, dizziness, fatigue, rash, abnormal blood counts (rare)</td>
</tr>
<tr>
<td>felbamate</td>
<td>Felbatol®</td>
<td>Various seizure types</td>
<td>Anorexia, vomiting, insomnia, nausea, headache, liver and blood toxicity</td>
</tr>
<tr>
<td>gabapentin</td>
<td>Neurontin®, Gralise™, Horizant®</td>
<td>Focal seizures</td>
<td>Sleepiness, dizziness, clumsiness, fatigue, twitching, fluid retention, weight gain</td>
</tr>
<tr>
<td>lacosamide</td>
<td>Vimpat®</td>
<td>Various seizure types</td>
<td>Dizziness, headache, nausea, vomiting, double vision, unsteadiness, fatigue, tremor</td>
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<tr>
<td>lamotrigine</td>
<td>Lamictal®, Lamictal® ODT™, Lamictal XR®</td>
<td>Various seizure types</td>
<td>Dizziness, headache, blurred vision, clumsiness, fatigue, tremor, nausea, skin rash</td>
</tr>
<tr>
<td>levetiracetam</td>
<td>Keppra®, Keppra XR®</td>
<td>Various seizure types</td>
<td>Behavior changes, irritability, fatigue, dizziness, headache</td>
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<tr>
<td>GENERIC</td>
<td>BRAND NAME</td>
<td>COMMON USES</td>
<td>POSSIBLE SIDE EFFECTS</td>
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<tr>
<td>lorazepam</td>
<td>Ativan®</td>
<td>Various seizure types (not for daily, long-term use, but to stop episodes of prolonged or cluster seizures)</td>
<td>Drowsiness, sleepiness, fatigue, poor coordination, unsteadiness, behavior changes. Sometimes prescribed for epilepsy but not FDA-approved for that use.</td>
</tr>
<tr>
<td>oxcarbazepine</td>
<td>Trileptal®, Oxtellar XR™</td>
<td>Focal and generalized seizures</td>
<td>Dizziness, drowsiness, nausea, headache, double-vision, vomiting, fatigue, and loss of coordination, rash</td>
</tr>
<tr>
<td>perampanel</td>
<td>Fycompa®</td>
<td>Focal and generalized seizures</td>
<td>Dizziness, headache, fatigue, loss of coordination, irritability, aggressive behavior</td>
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<tr>
<td>phenobarbital</td>
<td>Phenobarbital</td>
<td>Various seizure types</td>
<td>Drowsiness, irritability, hyperactivity (children), behavioral problems, difficulty concentrating, depression</td>
</tr>
<tr>
<td>phenytoin</td>
<td>Dilantin®, Phenytek®</td>
<td>Focal and generalized seizures</td>
<td>Poor coordination, insomnia, fatigue, nausea, rash, gum overgrowth, hairiness, thickening of features</td>
</tr>
<tr>
<td>pregabalin</td>
<td>Lyrica®</td>
<td>Focal and generalized seizures</td>
<td>Sleepiness, dizziness, clumsiness, fatigue, tremor, fluid retention, weight gain</td>
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<tr>
<td>primidone</td>
<td>Mysoline®</td>
<td>Various seizure types</td>
<td>Clumsiness, dizziness, appetite loss, fatigue, drowsiness, hyperirritability, insomnia, depression, hyperactivity (children)</td>
</tr>
<tr>
<td>rufinamide</td>
<td>Banzel™</td>
<td>Various seizure types</td>
<td>Fatigue, vomiting, nausea, headache, poor coordination, dizziness, double vision</td>
</tr>
<tr>
<td>tiagabine</td>
<td>Gabitril®</td>
<td>Focal seizures</td>
<td>Nausea, dizziness, anxiety, insomnia, fatigue, tremor, difficulty with concentration</td>
</tr>
<tr>
<td>topiramate</td>
<td>Qudexy XR®, Topamax®, Trokendi XR™</td>
<td>Various seizure types</td>
<td>Confusion, sleepiness, dizziness, clumsiness, difficulty thinking or talking, tingling sensation of the skin, nausea, decreased appetite, kidney stones</td>
</tr>
<tr>
<td>valproic acid</td>
<td>Depakene®, Stavzor®</td>
<td>Various seizure types</td>
<td>Upset stomach, altered bleeding time, liver toxicity, hair loss, weight gain, tremor</td>
</tr>
<tr>
<td>vigabatrin</td>
<td>Sabril®</td>
<td>Focal and epileptic spasms</td>
<td>Visual issues, abnormal MRIs, fatigue, poor coordination, weight gain, behavioral changes</td>
</tr>
<tr>
<td>zonisamide</td>
<td>Zonegran®</td>
<td>Various seizure types</td>
<td>Sleepiness, dizziness, decreased appetite, headache, nausea, irritability, difficulty concentrating, unsteadiness, kidney stones, rash (should not be used in individuals allergic to sulfa drugs)</td>
</tr>
</tbody>
</table>
The Epilepsy Foundation of Minnesota (EFMN) provides support, connection, and education to families as they overcome the challenges of living with epilepsy.

COMMUNITY PROGRAMS & SERVICES

Camp Programs
Camp Programs provide a safe, supportive and fun camp experience for youth with epilepsy. Program opportunities include a one week, overnight traditional camp experience for youth ages 9-17 as well as a one-day day camp for youth ages 8-12 to help prepare them for overnight camp. We also offer an adaptable family camp for those with additional physical, social, or emotional needs.

Connect Groups
A space to meet others on a similar epilepsy journey. Connect Groups are available to youth, teens, adults, and parents/caregivers. They’re designed for people to offer peer-to-peer support, share experiences, and ask questions. At Connect Groups, individuals impacted by epilepsy engage with others, share experiences, and learn of new resources in a safe and supportive environment.

Education Services
Education services includes seizure smart trainings and live webinars. Seizure smart trainings are customized to best fit with the varying audiences we train such as schools, workplaces, social service organizations, government agencies, health care facilities, etc. Webinars are developed annually and cover relevant topics and resources related to living with and managing epilepsy.

Information Services
Information Services provides individuals, caregivers, and professionals information and resources on a wide variety of epilepsy related topics through free, one-to-one customized support. EFMN staff use phone, email, virtual meetings, and the postal service to support requests. From diagnosis through treatment, we support people by providing information regarding healthcare, medications, transportation, EFMN events and programs, and more. We also provide a 90 day follow up program for newly diagnosed individuals and families to provide support and resources during this time.

Shining Star Program
The Shining Star program welcomes all youth under the age of 18 with epilepsy. Program components include connection opportunities for youth, support resources for parents, and awareness opportunities for families and communities. Shining Stars and their families have the opportunity to attend family and teen events, bring epilepsy awareness to their local communities, help recognize their school in their Excellence in Epilepsy, and connect with other youth and families impacted by epilepsy.

Financial Support
The Bridge to Independence Fund provides funding to individuals and families impacted by epilepsy during a time of crisis or unanticipated expenses. Like a bridge, the financial support is intended to provide a path from one situation to the next. Individuals impacted by epilepsy apply by sharing their need, cost, and why they need support. Award amounts depend on type of need and availability of funding. This fund is a one-time gift for those who receive it.
ADVOCACY
The advocacy and public policy department leads our efforts to shape policy at the local and state levels. With the goal of making Minnesota a better place for those living with epilepsy, the advocacy and public policy department identifies policy priorities and leverages grassroots and direct relationships to make meaningful changes to law that benefit the communities we serve.

Public Policy Priorities
We identify and pursue 3-4 public policy priorities annually that reflect the barriers and challenges faced by the epilepsy community in MN. EFMN acts as the primary lead on at least one of these priorities and partners with other organizers to support their efforts for the remaining priorities.

Advocacy Day at the Capitol
EFMN's annual day at the capitol is an opportunity for advocates, staff, and board members to meet with legislators, share their story, and influence policy. The day includes seizure recognition and response training for lawmakers, a program of speakers, and a full day of legislative meetings.

Epilepsy Advocacy Network
We support an active advocate network to connect participants with many backgrounds, experiences, and interests with policy opportunities relevant to them. The network provides advocates with the training they need to be effective advocates and engaging opportunities to practice those skills.

Coalition Partnerships
EFMN plays an active role in building community connections and relationships through coalitions and collaborative legislative work. We participate in advocacy groups focused on patient access, disability rights, voter engagement, and mental health.

COMMUNITY OUTREACH
Annually the mission outcomes division along with the board of directors' ad hoc diversity, equity, and inclusion committee sets a plan for concerted community outreach with individuals and communities identified as being traditionally underserved and/or underrepresented in EFMN's work. Community outreach projects are completed annually and include individual conversations, community conversations, assessment of collected qualitative data, and a subsequent multiphase plan for increased community engagement.