

Seizures

CHAPTER 29

Epilepsy

What are seizures? Seizures are sudden, usually brief, periods of changes in consciousness caused by shifts in electrical activity in the brain. A person having a seizure may lose consciousness and fall or collapse with convulsions (jerking movements). Or they may have few or no physical signs and just be “absent.” Or something in between. When they wake up, they may feel tired and confused.



The new onset of seizures happens more in infancy and early childhood. Seizures that repeat over a long period of time may be caused by epilepsy, a condition of the brain.

Not all seizures are epilepsy. For example, children who have once had a seizure with a high fever often will have seizures again when they have a fever—especially if other persons in the family have had seizures with fever. Fever seizures can be caused by ear or throat infections, as well as by bacterial dysentery (diarrhea with blood and fever) and they can be treated and cured with antibiotic medicines (see pp. 357 to 358, *Where There Is No Doctor*). Fever (or febrile) seizures are the most common form of childhood seizures, and lowering fever with paracetamol (acetaminophen, see p. 134) may stop them from repeating. Children who have fever seizures usually grow out of them.

Other seizures, including absence seizures that are less noticeable, may be epilepsy. Absence seizures are frequent breaks in a child’s consciousness that last only a short time — 10 to 15 seconds (see p. 241).

The chart on pp. 240 to 241 describes the main types of seizures, when they begin, and their treatments.

CAUSES OF SEIZURES AND EPILEPSY

Seizures come from injuries to, or an abnormal condition of, the brain. Common causes of seizures among children include:

- **Illness or injury to the brain.** Injuries may occur before birth, during birth, or at any time after. The same causes of brain injury that result in cerebral palsy can cause epilepsy (see p. 91). In fact, cerebral palsy and epilepsy often occur together. Meningitis is a common cause of this combination. In small children, common causes of seizures are high fever or severe dehydration (loss of liquids). In very ill persons, the cause may be meningitis, malaria of the brain, or poisoning (see *Where There Is No Doctor*, p. 178). Epilepsy that steadily gets worse, especially if other signs of brain injury begin to appear, may be a sign of a brain tumor (or of hydrocephalus in a baby, see p. 169). Seizures caused by a tumor usually affect the part of the body that receives signals from the part of the brain where the tumor is located. Sometimes, seizures may be caused by pork tapeworms that form cysts in the brain (see *Where There Is No Doctor*, p. 143). Head injuries from accidents or violence are a common cause of epilepsy.
- **Heredity.** Sometimes a child with epilepsy has a parent who also has epilepsy. However, this does not mean the parent has infected the child. Epilepsy is not a disease that can be passed among people.
- **Unknown causes.** For about half of all people with epilepsy, the cause is not known.

MORE ABOUT SEIZURES AND EPILEPSY

Mental ability. For many people, epilepsy does not affect mental ability. But because epilepsy is a condition of the brain, it may affect how the brain functions. Frequent uncontrolled seizures may injure the brain and cause delays in brain development. Having seizures at an early age, lack of medicines that control seizures well, and injuries to parts of the brain that control mood can affect brain function.

Types of seizures. (see p. 241). Some children may have generalized seizures (tonic-clonic or grand mal) that affect their entire brain and body. They may make strong, uncontrollable movements and lose consciousness. Others may have focal (partial) seizures that affect only one part of the brain. They may have brief spells with unusual movements of some part of the body. They can show unusual behaviors such as lip-sucking, pulling at clothes or changes in breathing, and a loss of awareness of their surroundings. Or they can have brief absences in which the child suddenly stops and stares—perhaps with blinking or fast movements of the eyelids.

Different types of seizures require different medicines (see chart on pp. 240 and 241).

Timing of seizures. Seizures may happen often, or happen weeks or months apart. Some children may have seizures that become more frequent and severe over time. Seizures may happen when a child has an infection or cold, or when they are not getting enough sleep. Absence seizures may come in groups—often in the early morning or late afternoon.

Seizures usually do not last long. Focal seizures usually last less than a minute. Generalized seizures seldom last more than 2 to 3 minutes. Rarely, however, a child may have an epileptic seizure that lasts more than 5 minutes. This is a medical emergency—get help.

Some kinds of seizures may appear at any age. Others begin in early childhood and usually disappear or change as the child grows older. But many people have epilepsy all their life.

Warning signs or aura. For some kinds of seizure, the child (and sometimes parents and caregivers) may be able to sense when it is about to begin. Some children experience a warning in which they see flashes of light or colors. Or they may suddenly cry out, feel fear, or sense imagined sights, sounds, smells, or tastes. In other kinds of seizures there is no warning. The child's body may suddenly jerk or move violently. When seizures are frequent, violent, and uncontrolled, children may need to wear some kind of safety helmet or other head protection.

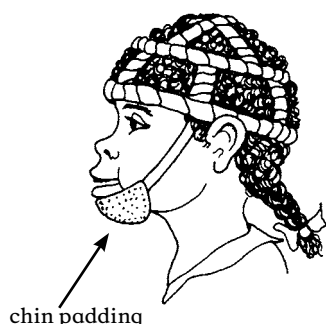
It may not be possible for newborns or young children to say how they feel before, during, or after a seizure. Parents and caregivers can help by observing and recording what they see and when. Write or draw what you see or keep count of the seizures by dropping a pebble into a jar every time a seizure occurs. If you can film a child having a seizure with a phone or camera, show this to a health worker so they can see the type, length, and intensity of the seizure. But remember: the child's safety comes first. Before filming, protect the child's head and remove anything that could cause injury.

DO NOT PUT ANYTHING IN THE CHILD'S MOUTH! No food, drink, or medicine, nor any object to prevent biting the tongue. This can block a child's airway and cause them to choke.

WHAT TO DO WHEN A CHILD HAS A SEIZURE

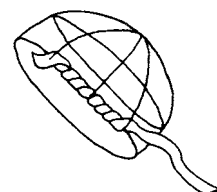
- Learn to recognize warning signs that a seizure is about to begin, such as sudden fear or a cry. Quickly protect the child by having them lie on a soft mat or other place where they cannot hurt themselves.
- When a generalized seizure starts, do not try to move the child unless they are in a dangerous place.
- Protect the child as best you can against injury, but do not try to forcefully control their movements. Remove any sharp or hard objects nearby. Remove eyeglasses if they are wearing them.
- Between spasms, gently turn the child's head to one side, so that spit drains out of the mouth and is not breathed into the lungs.
- After the seizure is over, the child may be very sleepy and confused. Turn the child on their side and let them sleep. For headache, common after a seizure, give acetaminophen (paracetamol) or ibuprofen (see p. 134).

HEAD PROTECTION



To protect the head of a child who often falls during a seizure, it may be wise to wear a helmet that protects her head, like a bicycle helmet.

You can make a "cage" of stiff wire and wrap it with strips of inner tube, soft cloth, or sponge rubber.



MEDICINES TO PREVENT SEIZURES

No medicines cure epilepsy, but medicines can prevent and control seizures as long as the child takes the medicine regularly. Many different medicines are used for epilepsy. Some types of seizures are controlled better by one medicine and some by another, or by a combination of medicines. Some children's seizures are easy to control and others are difficult. It may be necessary to try different medicines and combinations to find the most effective treatment. In a few children, no medicines will control the seizures completely.

As long as a child has epilepsy—which may be for a short time or for their entire life—they must take anti-seizure medicines to control their seizures and prevent further injury.



Choosing medicines

The best medicine (or medicine combination) for a child with epilepsy is one that is:

- effective (prevents the seizures).
- safe (has few side effects).
- affordable (because it must be taken for years).
- easy to take (long-acting, few doses a day).
- accessible (easy to get).

CAUTION: Great care is needed to select the medicines that help the individual child most and do the least harm. Try to avoid giving so much medicine that the child always seems sleepy, dizzy, slow-moving, or loses interest in things. A few seizures may be better than too much medicine, which can weaken learning, prevent the child from playing or doing things with others, and can even worsen seizures in some children.

When children with epilepsy take their medicine regularly for an extended time and successfully prevent having seizures, sometimes the medicine can be stopped and the seizures will not return. To make it more likely, the child should take anti-seizure medicine for at least a year after their last seizure. They can then take a gradually lowered dose and finally stop the medicine, usually over weeks or months. Always lower the dose and stop the epilepsy medication gradually. However, if seizures return, medicines should be restarted, at least for another year before trying to stop again.

WARNING: Abruptly stopping medicines can cause seizures to return quickly, perhaps more strongly than before.

The best medicine to try first for almost all types of seizures among children is usually carbamazepine. It is very effective and is relatively safe, cheap, and easy to take. Usually, it is given to children in 2 doses every day.

The next best medicine for generalized seizures is usually valproate. It is also fairly safe, cheap, and usually needs to be taken in 2 doses every day. Phenobarbital and phenytoin are also cheap and easily available medicines. However, phenobarbital may cause learning delay in young children. Phenytoin can also cause side effects, such as swelling or too much growth of the gums or a flattening of facial features among young children. It can also worsen generalized seizures for some children.

Sometimes, only a combination of medicines can stop a child from having seizures. A second drug may be added after the peak dose of the first drug is reached. Any new medicine should be added in consultation with a doctor or a health worker.

Some doctors prescribe more expensive, harder to get, less safe and often less effective medicines before trying the medicines mentioned above. Partly this is due to drug companies advertising their more expensive products. Also, in some countries, phenobarbital is difficult to get in pill form. The result is that many children's seizures are poorly controlled, using costly drugs that cause severe side effects. Rehabilitation workers need to realize this and do what they can to help provide the safest, cheapest medicines that will effectively control a child's seizures.

CAUTION: To prevent choking, do not give medicines to a child while she is lying on her back, or if her head is pressed back. Always make sure her head is lifted forward. Never give medicines by mouth to a child while she is having a seizure, or while she is asleep or unconscious.

It is usually best to start with only one anti-seizure medicine, usually carbamazepine or valproate. If these medicines are not available, try phenobarbital or phenytoin. Start with a low to medium dose, and if after a week seizures are not controlled and there are no serious side effects, increase to a higher dose. After a few days, if the seizures are still not controlled, consult a health worker about whether and how to add a second medication. Always start with a low to medium dose and gradually increase as needed.

NOTE: Taking the medicine at the same time(s) every day can help maintain the same amount of drug in the blood. It can also make it part of a child's routine and help the parent or caregiver to remember to give the medicine.



WARNING: All anti-seizure medicines are harmful if a child takes too much. Be careful to give the right dose and to keep medicines out of reach of children.

INFORMATION ON DOSAGE AND PRECAUTIONS FOR ANTI-SEIZURE MEDICINES

Carbamazepine (*Tegretol*)

Useful for many types of seizures as a first choice, or in combination. Especially useful for psychomotor seizures (see p. 241).

Usually comes in: tablets of 100 mg or 200 mg

Dosage: Usually given 2 times a day. Give with food. Start with these doses:

children under 6 years 5 mg/kg/day, or 50 mg by mouth 2 times a day.
If necessary, increase dose weekly by 5 mg/kg/day but never give more than 30mg/kg/day.

children 6 to 12 years 100 mg by mouth, 2 times a day
If necessary, increase dose weekly by up to 100 mg per day until seizures stop.

children over 12 years 200 mg by mouth, 2 times a day
If necessary, increase dose weekly by up to 200 mg per day until seizures stop.

The dose of carbamazepine should be adjusted to the individual child. Try to give the lowest amount of medicine that stops the seizures. A dose that is too high can cause dizziness, unsteady walking, or vomiting.

Side effects & complications: If a skin rash develops 2 to 8 weeks after starting carbamazepine, talk to a health worker about changing to a different medicine.

Valproate (*Depakene*)

Used alone or in combination with other anti-seizure drugs for focal seizures with absences, especially group seizures. Do not use with carbamazepine.

Dosage: Usually given 2 or 3 times a day. Start with these doses:

children under 6 years 10mg/kg/day, or 100 mg by mouth 2 times a day.
Use with extreme caution and as the only medicine. If necessary, increase dose weekly by 5 mg/kg/day but never give more than 60mg/kg/day.

children 6 to 12 years 200 mg by mouth 2 times a day
If necessary, increase dose weekly by up to 100 mg per day until seizures stop.

children over 12 years 300 mg by mouth 2 times a day
If necessary, increase dose weekly by up to 200 mg per day until seizures stop.

The child may gain weight. Some children develop liver problems, signs of which include sudden loss of appetite, jaundice in the eyes, or change in the color of urine. People who could get pregnant should not use this medicine.

Phenytoin (diphenylhydantoin, Dilantin)

For many types of seizures, but not for absence seizures (see pp. 240 and 241). Phenytoin may make these seizures worse.

Usually comes in: capsules or tablets of 25 mg, 50 mg, and 100 mg
syrup with 25 mg in each 5 ml (1 teaspoon)

Dosage: Usually given 2 times a day. Start with these doses:

children under 6 years 3 to 5 mg/kg/day, or 25 mg by mouth 2 times a day.

6 to 12 years old 75 mg by mouth, 2 times a day.

If necessary, increase after 2 weeks by 25 mg a day until seizures stop.

children over 12 years 100 mg by mouth, 2 times a day.

If necessary, increase after 2 weeks by 25 mg a day until seizures stop.

After 2 weeks, if the seizures are not completely prevented, the dose can be increased little by little, but not to more than twice the starting amount. The difference between not enough and too much can be very small. If child has no seizures during several weeks, try lowering the dose little by little until you find the lowest dose that prevents the seizures.

Side effects and complications:

Watch for dizziness, eye-jerking, slurred speech, seeing double, and drowsiness. Lower the dose if any of these early signs of poisoning occur. They could cause permanent brain injury.

- Swelling and too much gum growth often occurs with long-time use. It can be partly prevented by regularly brushing and cleaning teeth and gums (see *Where There Is No Dentist*, p. 109). If the gum condition is severe, consider changing medicines.
- High dosage may harm the liver.
- Occasional side effects: increased body hair, rash, loss of appetite, vomiting.
- Use by someone who becomes pregnant may make cleft lip and cleft palate in a newborn more likely (see p. 120).



very swollen,
sore gums almost
covering teeth

WARNING: Sudden stopping of phenytoin may cause the child to have a long-lasting seizure. Be sure to lower the dosage gradually when stopping or changing any epilepsy medicine.

Phenobarbital (phenobarbitone, phenobarb, Luminal)

For all types of seizures.

Usually comes in: tablets of 15 mg, 30 mg, 50 mg, 60 mg and 100 mg.
syrup with 15 mg in each 5 mL (1 teaspoon)

Dosage: Usually given by mouth 2 times a day, but a double dose can be given 1 time a day at bedtime.

children under 7 years 3 to 5 mg/kg/day, or 10 to 25 mg by mouth
2 times a day.

children 7 to 12 years 25 to 50 mg by mouth, 2 times a day

children over 12 50 to 150 mg by mouth, 2 times a day

Some children do better with 1 dose a day instead of 2 doses. Give twice the amount listed here at bedtime. But if the seizures return or the child has problems going to sleep or waking up, go back to 2 doses a day of the regular amount.

Side effects and complications of phenobarbital:

- Too much can cause sleepiness or slow breathing.
- Some children may experience irritability, aggression, confusion or over-excitement.
- Challenges with learning and memory, attention and concentration.
- Rare side effects include mild dizziness, eye-jerking, and skin rash.
- Bone growth problems may occur in some children. Extra vitamin D may help.
- Bitter taste. It may help to grind up the tablet and give it with honey or jam.
- Habit forming.

CAUTION: Giving too much can poison the child.

OTHER DRUGS SOMETIMES USED FOR EPILEPSY

- **Ethosuximide (Zarontin)** First choice for absence epilepsy, especially if seizures occur in groups in the morning and evening. The starting dose for children between 3 to 6 years of age is 1 capsule (250 mg) per day; for children 6 years and older, 2 capsules (500 mg) per day. Give with food to avoid stomach ache. Rarely, causes liver damage.
- **Corticosteroids** (or corticotropin) These are sometimes tried for baby spasms and myoclonic seizures (see p. 240) that are not controlled by other medicines. Long-term use of these medicines causes serious and possibly dangerous side effects (see p. 137). They should be used only with highly skilled medical advice when all other possible medicines have failed.
- **Diazepam (Valium)** Sometimes used for newborn seizures or baby spasms (see p. 240), but other medicines should be tried first. It can cause an increase in the number and severity of generalized tonic-clonic (grand mal) seizures. May cause sleepiness or dizziness. Habit forming. Start with about 1 to 2.5 mg, 3 or 4 times daily. Do not give to children under 6 months.



CAUTION DURING PREGNANCY: Many anti-seizure medicines, especially phenytoin and valproate, may increase the risk of disabilities present at birth when taken during pregnancy. A high dose of phenobarbital may pass through breastmilk and cause drowsiness in babies. Therefore, those who are pregnant or of childbearing age should use these drugs only when seizures are common or severe.

TREATMENT FOR A LONG-LASTING SEIZURE

When a seizure has lasted more than 5 minutes:

- if someone knows how, inject IV diazepam (**Valium**) or phenobarbital into the vein or, using a syringe with no needle, in the rectum.

CAUTION: Inject these medicines very slowly. For diazepam, take at least 3 minutes to inject the dose for children. For phenobarbital, inject children at the rate of 30 mg/ minute or slower, and in adults, not more than 100 mg/minute.

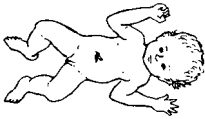


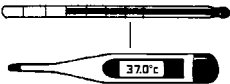


 <p>Doses for injectable diazepam:</p> <p>Adults 5 to 10 mg</p> <p>Children 6 to 12 years. 3 to 5 mg</p> <p>Children under 6 1 mg for every 5 kg of body weight</p>	 <p>Doses for injectable phenobarbital:</p> <p>Adults 200 mg</p> <p>Children 6 to 12 years 150 mg</p> <p>Children 2 to 6 years 100 mg</p> <p>Children under 2 years 50 mg</p>
--	--

NOTE: These medicines do not work as fast or well when they are injected into a muscle. If you only have injectable or liquid medicine, put it up the rectum with a plastic syringe without a needle. Or grind up a pill of diazepam or phenobarbital, mix with water, and put it up the rectum.


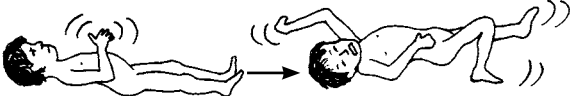


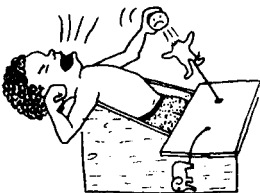
If the seizure does not stop in 15 minutes after giving the medicine, repeat the dose, but not more than once.

Types of seizures

Note: This information is for rehabilitation workers and parents because many doctors and health workers do not treat seizures correctly. With care, perhaps you can do better. However, correct diagnosis and treatment can be very difficult. If possible, get advice from a well-informed medical worker. Ask her help in using this chart. It is adapted from *Current Pediatric Diagnosis and Treatment* by Hay Jr., Levin, Abzug, and Bunik (Lange Medical Publishing), in which more complete information is provided.

TYPE	AGE SEIZURES BEGIN	APPEARANCE	TREATMENT
Newborn seizures (neonatal seizures) 	birth to 2 weeks	Often not typical of later seizures. May show sudden limpness or stiffness; brief periods of not breathing and turning blue; unusual cry; eyes roll back; blinking or eye-jerking; sucking or chewing movements; jerks or strange movement of part or all of body. WARNING: Make sure spasms are not from tetanus or meningitis (see p. 233). With cerebral palsy in the newborn, the baby is usually limp. Stiffness and/or uncontrolled movements usually appear months later, but the baby does not lose consciousness.	Phenobarbital or phenytoin. Add diazepam if not controlled. (Seizures due to brain injuries at birth are often very hard to control.)
Baby spasms (infantile spasms, West's syndrome)	3 to 18 months (usually about 6 months)  	Sudden opening of arms and legs and then bending them, or repeat patterns of movement. Spasms often repeated in groups when waking or falling to sleep, or when very tired, sick, or upset. Many children with these spasms develop cognitive delay.	Corticosteroids may be tried—but can be dangerous. Try to get help from an experienced doctor or health worker. Valproate or diazepam may help.
Fever seizures (Febrile seizures) 	3 months to 6 years (peak at 6 to 18 months)	Usually generalized seizures (see next page) that happen only when child has a fever from another cause (sore throat, ear infection, bad cold, among others). Usually lasts less than 5 minutes but rarely can last up to 15 minutes. Often a history of fever seizures in the family. WARNING: Look for signs of meningitis.	A child who has had fever seizures on several occasions should be treated for the cause of the fever. Lowering fever with paracetamol (acetaminophen) can prevent fever seizures from continuing (see p. 134). If the seizure lasts more than 5 minutes, use diazepam. Phenobarbital is rarely needed.
Myoclonic seizures — sudden muscle jerks (Lennox-Gastaut syndrome) 	any age but usually 2 to 7 years	Sudden violent spasms of some muscles, without warning, may throw child to one side, forward, or backward (drop attacks). Usually no loss of consciousness, or only brief. Many children also have generalized seizures. May be a history of baby spasms (see above) in earlier childhood.	Difficult to treat. Try phenobarbital, with valproate. If no improvement, consider trying corticosteroids as in baby spasms, or other medicines with medical advice. Protect child's head with headgear and chin padding. 

Types of epileptic seizures (continued)

TYPE	AGE SEIZURES BEGIN	APPEARANCE	TREATMENT
Blank spells or absences (childhood absence epilepsy)	3 to 12 years 	Child suddenly stops what she is doing and briefly has an empty or blank look. She usually does not fall, but does not seem to see or hear during the seizure. These absences usually happen in groups and usually last 3 to 10 seconds. She may make unconscious movements, or her eyes may move rapidly or blink. These seizures can be brought on by breathing rapidly and deeply. (Use this as a test.) Often confused with psychomotor seizures, which are much more common. Unlike other seizures, the child may not experience a warning sign or aura, or confusion after the seizure (see p. 234).	Ethosuximide and valproate are most effective and best tolerated. Add phenobarbital only if necessary.
Focal seizures (partial seizures)	any age 	Movement begins in one part of the body. May spread and become generalized. Note: If seizures that occur in one part of the body get worse and worse, or other signs of brain injury begin to appear, the cause might be a brain tumor.	Try carbamazepine. If seizures continue, try phenobarbital or phenytoin (or both).
Mind-and-body seizures (psychomotor seizures)	any age 	Starts with warning signs: sense of fear, stomach trouble, odd smell or taste, hears or sees imaginary things. Seizure may consist of an empty stare, unusual movements of face, tongue or mouth, unusual sounds, or unusual movements such as picking at clothes. Unlike blank spells, these seizures usually do not occur in groups and they last longer. Most children with psychomotor seizures later develop generalized seizures.	Try phenobarbital first —then phenytoin, or both together, then carbamazepine, or all 3 together. Valproate may also be useful. Psychological counseling sometimes also helps.
Generalized or tonic-clonic seizures (also called big or grand mal)	any age 	Loss of consciousness, often after a vague warning feeling or cry. Uncontrolled twisting or violent movements. Often rhythmic and repetitive. Eyes roll back. May have tongue biting, or loss of urine and bowel control. Followed by confusion and sleep. Often mixed with other types of seizures. Often family history of seizures.	Try phenobarbital, carbamazepine, valproate. Combinations may be necessary. Phenytoin may be effective.
Temper tantrum fits (not epilepsy)	under 7 years 	Some children in "fits of anger" stop breathing and turn blue. Lack of air may cause brief loss of consciousness or convulsions (body spasms, eyes rolling back). These brief episodes are not dangerous.	No medical treatment is needed. Use methods to help the child improve behavior (see Chapter 40).

HELP THE COMMUNITY UNDERSTAND EPILEPSY

Seizures can be frightening to those having them as well as those who see someone having them. For this reason, children with epilepsy (and adults) may have a hard time gaining acceptance in the community.

Some parents may try to keep the child's seizures a secret and hide them from others who unfairly shame, treat badly or isolate a family that has a child with epilepsy.

For centuries, epilepsy was mistakenly believed to be the result of witchcraft or the work of evil spirits. However, epilepsy is a condition that causes changes in electrical activity in the brain. It is not a sign of mental illness nor does it result from bad actions by the child or parents or ancestors. When medicines control epilepsy, you cannot even know that a person has it.

NOTE: Epilepsy is not contagious! You can't catch it like a cold.

Children with epilepsy must be supported to live with freedom, confidence and respect. Parents of children with epilepsy and health workers can help everyone in the community realize that. Neighbors, teachers, bus drivers, and police must learn about epilepsy and how to help a person having a seizure.

It is important for their well-being that children with epilepsy feel seen and heard. They can go to public markets and playgrounds with family and friends. School-aged children must go to school and help their family with day-to-day chores. Exercise and play help them stay fit and healthy, and help them learn and develop relationships. This is true even if seizures are not completely under control. School teachers and other children should learn about epilepsy and how to protect a child when she has a seizure. If they learn more about epilepsy it will help them to be supportive rather than afraid or cruel (see CHILD-to-child activities, p. 429.)

Although children with epilepsy should be encouraged to lead active lives, certain precautions may be necessary, especially for those children who have frequent and sudden seizures.

Children can learn to help keep each other safe, including any children with epilepsy, especially at times when danger is greatest: in and around rivers, lakes and swimming pools, near fire or in the kitchen, and while climbing trees or riding bikes or playing sports.

BEHAVIORAL AND PHYSICAL CHANGES IN CHILDREN WITH EPILEPSY

- A child may show aggressive or violent gestures before, during or after a seizure. For example, they may bite or feel a need to bite something.
- A child may lose consciousness and wake up feeling severely confused, briefly losing touch with reality. Seizures often cause fear, agitation, and other strong emotions, both for the child and parents. If parents and caregivers cannot talk about and understand their own feelings of shock, overwhelm, fear and sadness, they may scold the child too much and harm the child with their own frustrations.
- A child may lose control of their bladder and wet themselves during a seizure.
- Medicines that help control seizures may also change the child's alertness, learning, moods and development.

Parents and caregivers must accept and love their children, including their experience with seizures and epilepsy. Epilepsy is neither the child's nor the parents' fault, and does not determine how the child will grow up. Parents, teachers, neighbors, other children and family members can all support a child's physical, mental and emotional development rather than misunderstanding, punishing, and holding the child back.