

Teacher's Information Booklet:



The **A B C's** of Epilepsy and Seizure Disorders in the Elementary Classroom...



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Dear Educator:

Epilepsy is both a hidden disability and an episodic disorder. There are many different types of seizures which vary in frequency and intensity. Children who are affected often feel isolated and 'different' from the rest of the class. They may live in fear that they will have a seizure in front of their peers. This booklet was produced by a group of parents who want you to know as much as possible about their children's seizure disorders. These parents know that an informed and sensitive educator is an essential role model in the classroom.

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Introducing Epilepsy & Seizure Disorders

Epilepsy affects 1 in every 100 students. Despite years of teaching experience, you may never have known any of your students to have a seizure disorder. This apparent contradiction is usually due to the hidden nature of the disorder and the variety of forms it takes.



Aside from seizures themselves, there are no outward physical signs that make children with epilepsy identifiable. Epilepsy itself should not impact their normal growth and development. They are as active and interested in the same experiences as their peers.

Early recognition and treatment is important because children with epilepsy can face problems in school.

These include:



Learning disabilities

Safety risks

Behaviour problems

Social problems

Chronic absenteeism

The Role of the Teacher...

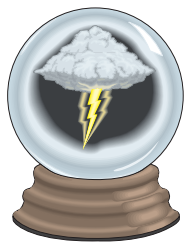
The teacher plays a central role in the acceptance and self-development of the child who has seizures in the classroom.

Sufficient knowledge and understanding of what epilepsy is will allow the teacher to educate the other students and influence the way in which children respond to this disorder.



Never Heard of It?

It Starts in the Brain...



What is Epilepsy?

Technically, epilepsy is a “neurological disorder resulting from sudden bursts of electrical energy in the brain.” The term “epilepsy” is a broad one that covers a large family of disorders with many different causes. Epilepsy can be caused by anything that harms the brain, such as scars, injury, tumors, infections, a malformation of vessels of the brain, or even a biochemical abnormality. However most children with epilepsy have no brain damage and are neurologically normal.

Anyone can have a seizure, and many people will have at least one seizure at some point in their lives. It is not until a person has two or more seizures that s/he would be considered to have ‘epilepsy’ or a ‘seizure disorder’.

Describing epilepsy (ep-il-lep-see) to a child ...

Everything you do begins in the network of cells in the brain. These cells send little signals to each other, faster than you can imagine. The signals travel in nerves all over the body so you can talk, run, jump, think, hear, see, touch and do all the things you do every minute of every day. Brain cells are even hard at work while the rest of you sleeps!

For children with epilepsy the brain cells can send mixed up messages. This could make their arm shake without them wanting it to shake. It could make things look, sound, or feel strange to them- just for a moment. It could make them stop and stare for a few minutes or sleepwalk around the class. The child could fall down, get stiff, and then shake all over for a few minutes. All these changes in things they feel or do cannot be stopped. There are all types of seizures.



Epilepsy and Learning



Epilepsy is a chronic disorder. The occurrence and frequency of seizures are unpredictable. The child, the family, and the teacher must learn to live with this uncertainty, and not let fear of a seizure interrupt a normal life.

Children with epilepsy exhibit the same wide range of intelligence and ability as other children. Children don't require special education simply because they have epilepsy. Some children with epilepsy may require it just as some children without epilepsy will require it. Many children do need extra support because of the side effects of their medications and other brain anomalies. Some neurological disorders that cause epilepsy may also cause learning difficulties.

In the early years severe, frequent seizures can affect the learning process, causing cognitive delays. In the school years, absenteeism can impact the learning process by causing the child to miss socialization opportunities and class instruction.

Children also feel tired after nocturnal or frequent seizures.

Psychosocial effects of seizures, including feelings of lack of control, poor self image, poor attitude toward school and social problems can affect school performance.

Negative reactions from peer groups and teachers to epilepsy can adversely affect the child with a seizure disorder.

Possible Seizure Triggers at School

Not taking medications properly

Stress generated by change

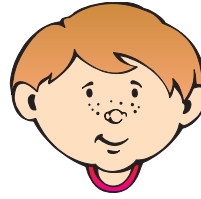
Poor diet and eating habits

Stress, excitement, & emotional upset

Lack of sleep

Inactivity and boredom – research has shown that individuals who are isolated and overprotected are more likely to have a seizure

Television, videos, computer screens, and flashing lights, or anything with a strobe effect can trigger seizures



Memory and Concentration:

Essentials for School

There is no cure for epilepsy. Seizures can be controlled in an estimated 80% of all cases by the use of anti-convulsant medication, and in 70-80% of children the epilepsy resolves after a few years.

Possible Side Effects of Medications:

Learning Capacity: concentration, short term memory loss

Alertness: hyperactivity, drowsiness, fatigue

Motor Capacity: hand, eye, balance, speech co-ordination

General well-being: unsteadiness, vomiting, dizziness

Mood changes: depression, aggressiveness, anti-social behaviours

Toxicity: liver damage, anemia

Is Epilepsy Contagious?

No. In approximately 75% of all cases of epilepsy there is no known cause. Of the other 25%, the following are some of the most frequent identified causes:



Brain injury to the fetus during pregnancy

Birth trauma and birth asphyxia

Brain malformations

Heredity

Brain tumour and stroke

Aftermath of infection such as meningitis

Head trauma such as in a car accident

Alteration in blood sugar, as in hypoglycemia

Watch Closely...

If all seizures were convulsions, there would be no need for this booklet. Many types of seizures are hard to recognize because they last such a short time and they look so much like the normal things that children do.

Signs of “hidden seizures”:

Short attention blackouts that look like daydreaming.

A child falls down suddenly for no reason.

A child rolls his eyes and blinks very fast.

Repeated movements that look out of place or unnatural.

A child nods his head as if falling asleep and acts as if nothing has happened.

The child stops what they are doing and stares at nothing for a moment or two.

Seizures Come in Many **SHAPES** and **SIZES**

Absence Seizures



These are common in children and are often associated with learning difficulties. This seizure type is often undiagnosed.

This seizure type looks like a staring spell or daydreaming.

The student experiences a brief loss of consciousness accompanied by eye blinking, slight muscle movements around the mouth, or arm movements.

These seizures usually last 2-10 seconds but happen frequently throughout the day.

After the seizure, the child will immediately regain full awareness and be able to resume full activity.

Often go undiagnosed until a more significant seizure occurs.

What You Can Do to Help

Inform the parent that you believe the child may be having this type of seizure.

Let the student know what they missed from the lesson/activity once he or she regains awareness.

Pair the student up with a buddy who can help fill in the gaps.

Repeat all expectations & instructions several times.

Simple Partial Seizures

These seizures are limited to one area of the brain.

The student will not lose consciousness during a seizure

The child's senses could be distorted causing him to see, hear, or smell experiences that are not real.

He or she may have unusual feelings.

This type of seizure usually lasts 1-5 minutes although it may last longer.

One or more limbs may have jerky movements which cannot be stopped.

It may be necessary to comfort and reassure the child.

Complex Partial Seizures

These seizures may cause the child to express a variety of inappropriate automatic behaviours such as tapping the desk, picking at clothes, making chewing movements, or wandering around.

Student loses awareness of surroundings.

This type of seizure usually lasts 1 to 5 minutes.

Recovery will be gradual and the child may feel confused for a while after a seizure.

Child cannot recall what happened during a seizure.

What You Can Do to Help

If the child wanders, gently lead him back to his seat.

Speak to the child calmly and reassure him or her.

Do not grab the student or speak loudly.

Guide the child away from obvious hazards such as stairs, play equipment, or Bunsen burners.

If the child is confused afterwards, help to re-orient him.

Generalized Tonic-Clonic Seizures

At the start of a seizure, the child will cry out as the chest muscles contract, forcing air out of the lungs.

The student will fall unconscious, his/her muscles will stiffen and then the extremities will jerk and twitch.

The child may lose bladder and/or bowel control.

The eyes may roll back and the child may drool.

If the student bleeds from the mouth, it's probably because he or she has bitten his/her tongue.

Breathing may be shallow or even stop temporarily, then return once the jerking movements stop. This will cause the pulse to be weak and skin and lips to turn bluish – but colour will come back.

These seizures usually last a few minutes but they may last considerably longer.

The child may be confused and tired after the seizure.

What You Can Do to Help

Do NOT put anything in the child's mouth.

Do not restrain the child.

Move the child away from furniture or any other object which may harm them.

Turn the child on his/her side to keep the air passage clear after the seizure is over.

Place a pillow or jacket (whatever is handy) under the child's head.

Try to provide a sense of security (talk in a calm voice).

Let the child rest after the seizure is over.

If the seizure lasts more than 5 minutes, phone for an ambulance.

Note the time the seizure starts and ends.

Teaching Strategies



1. Children with “absence” seizures frequently blank out during the day causing them to miss relevant instructions and content. Try to repeat instructions several times or use a consistent ‘step-by-step’ strategy for them to follow.
2. Establish a ‘buddy system’ for the child with seizures. The buddy can answer questions, and provide missed class work and homework.
3. Ask the child with epilepsy if they would prefer to sit at the front of the class to aid in concentration.
4. Use physical prompts (pointing to a page, writing on the blackboard) to help keep the student oriented.
5. After a seizure the child may be too exhausted to write a test or give a presentation to the class. While it is important to maximize the amount of instruction time by keeping the child in the classroom it may also be necessary to modify expectations based on seizure activity.
6. Try to make the child’s experience as ‘normal’ as possible. It is important not to be overprotective, or to allow exemptions or restrictions in the early years to damage a child’s emotional growth.
7. Do not allow the child to carry out any activity more than 1 m (3’) off the ground, e.g. gym class, in the playground.
8. Children should be allowed to go swimming, but with adult supervision.



Watch for Signs of Depression



Depression is quite common in children who have epilepsy. It may be a side effect of medication, or be caused by other factors such as stress, major disappointment, or chemical imbalance in the body. The diagnosis itself is incredibly overwhelming for a child!

Depression can have a major impact on a child's life. It's important to be aware of the possibility that the child with a seizure disorder may feel depressed.

Teachers, please look for these signs in the classroom and report them to the child's parents:

Emotional changes: The child may exhibit a troubled and unhappy state of mind. The child may feel worried, guilty, angry, fearful, helpless, lonely, and be quiet or withdrawn.

Intellectual changes: The child may have trouble concentrating or experience chronic negative thoughts. Look for a child who was a good student but suddenly receives poor marks.

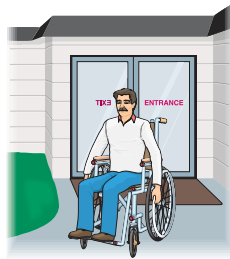
Physical changes: The child may complain of headaches or general aches and pains. He may be unmotivated, and lethargic. The child may also develop eating problems.

Behavioural changes: The child may withdraw from others and not want to interact with friends, play or take part in fun activities he or she used to enjoy. The child may cry easily and display angry or aggressive behaviours.

Where to Go From Here

Contact your local epilepsy chapter to book a staff presentation to answer all of your questions about seizure types, triggers and first aid response.

In London, call 433-4073 to schedule an interactive class presentation including props, games, and the **Kids on the Block** puppet troupe's epilepsy skits.

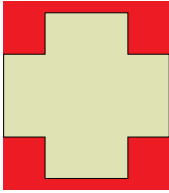


PLEASE NOTE: Seizures are a daily reality for many families. When to call 9-1-1 can be found on the next page of this booklet. Please use discretion when calling an ambulance.

Meet with the parents to discuss the child's academic and social challenges. Ask the parents for specific written instructions about the child's seizure types, medications and first aid response.

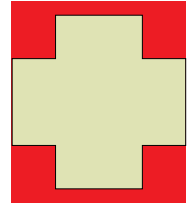
Establish a communication plan with the child's parents. This can be a telephone call or a daily journal. Discreetly record the type and frequency of seizures. This is important information for the parents to share with their neurologist.

Emergency and First Aid Action!



When to call

9-1-1



Does the child have a history of seizures? Call for help when the child who has no known history of seizures has one.

Confusion after a seizure is always common.

Always notify parents if their child has a seizure, unless the seizure is a brief blank spell.

When a seizure lasts for more than 5 minutes, or appears to end and then starts again – seek medical assistance. This may be a condition called *status epilepticus* – a life threatening medical emergency.

When a child is physically hurt during a seizure (cuts head, falls off play equipment, burns hands).

When a seizure is in the water – inhaling water can cause heart or lung damage.

Can We Be of Service to Your School?

Please ask The Epilepsy Support Centre about the interactive presentations we offer, as well as other helpful items:

Kids On The Block, the puppet troupe with an educational message about epilepsy.

Teens Talking to Teens, an innovative new pilot program for older kids.

Presentations to Staff including props, games, videos and more!

Classroom Presentations also includes props, games, videos and more!

Resource Materials from our library to your hands.

Links to Tutoring

Links to Other Community Resources

Support Services and Counselling



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