A seizure is “a brief, temporary disturbance in the electrical activity of the brain” and may affect:
- Muscle control and movement
- Speech
- Vision and/or eye movement
- Awareness and/or behaviour

Seizures can be convulsive or non-convulsive.

They may vary in frequency and severity.
Examples of Signs of a Seizures

- Blank staring into space
- "Empty" look in eyes
- Rapid blinking
- Eyes rolling upward
- Periods of unresponsiveness
- Inability to pay attention
- Repetitive (tic-like) movements of body parts, usually head, arms, legs
- Total body jerking with eyes rolled back in head
- Mouth movements with a dazed look
- Frothing at mouth
- Loss of consciousness
- Loss of body control
- Dazed walking
- Repeated confusion
Epilepsy:
- Neurological medically diagnosed condition that makes people susceptible to seizures
- Sometimes called a seizure disorder.
- Can develop at any age
- Seizures are chronic (ongoing and frequent)
- Seizure can often happen without known cause

Many people with epilepsy experience more than one type of seizure.
What is the difference between a seizure and epilepsy?

- **Seizures** are often symptoms of another health problem: diseases, fever, temporary medical, neurological or neurosurgical illness.

- After the person is treated (illness is resolved) the **seizures** do not occur again.

- **Epilepsy** is a chronic (ongoing) series of seizures, and can develop at any age. The seizures reoccur frequently and often without known cause.
Why do Seizures occur?

A child may have many reasons for seizures:

**HEAD INJURY**
- MVAs, Sports accidents
- Falls
- Head trauma

**BIRTH INJURY**
- Brain injury to fetus during pregnancy & birth
  - Perinatal asphyxia
  - Postnatal vascular accidents

**INTRACEREBRAL INJURIES**
- Tumours
- Strokes

**CONGENITAL DISORDERS**

**HEREDITY**
Inherit different degrees of susceptibility to seizures

**METABOLIC DISORDERS**

**FEVER**

**INFECTION**
- Meningitis
  - Viral encephalitis
  - Measles, Mumps
  - Diphtheria
What Triggers Seizures?

- Triggers can include:
  - Stress
  - Excessive excitement/stimulation
  - Excessive fluid intake
  - Extremely low blood sugar in diabetics
  - Sunlight, heat, humidity
  - Flickering lights
  - Skipping meals and poor nutrition
  - Illness, fever, allergies
  - Lack of sleep
  - Withdrawal from medicine, illegal drugs, or alcohol
  - Missed medication
There are several different types of seizures. They are divided into 2 broad types:

**Partial**
- Occurs in PART of the brain
  - Simple Partial
  - Complex Partial

**Generalized**
- Occurs in the WHOLE brain
  - Absence
  - Myoclonic
  - Tonic-Clonic
  - Atonic

http://www.bing.com/videos/search?q=bc+epilepsy+youtube&qpt=bc+epilepsy+utube&FORM=VDRE#view=detail&mid=0CEF8F2AE89146877CF50CEF8F2AE89146877CF5 Epilepsy in schools
Treatment for Seizures

➢ **Medication**
  ◦ Most common method
  ◦ Seizures can be completely controlled in 80% of all cases
  ◦ A control, not a cure
  ◦ **Goal:** To use the least amount of drugs and to suffer the least amount of side effects

➢ **Surgery** may be effective for **some** children

➢ **Special Diet** may be used in some cases
What should you do?

1. **Stay calm.** Most seizures last less than 5 minutes
   Note the time the seizure started.

2. **Do not restrain** the person during the seizure.

3. **Protect the person from injury:**
   - Ease the person to the floor.
   - Move hazardous objects out of their way.
   - **Do not** put anything in their mouth (a person cannot swallow their tongue).
4. **Put the child into the recovery position**
   - Roll child on their side once seizure is ended and it is safe to do so.
   - Place something soft under their head
   - Loosen tight clothing, remove objects (i.e. glasses).

7. **Document on the Seizure Record Form:**
   - Describe the seizure.
   - How long the seizure lasted.
   - How the person acted immediately before and after the seizure.
Seizure First Aid

8. Reassure and provide comfort. Afterwards, talk gently to comfort and reassure the child. Stay with them until they are re-oriented.

Post seizure period:
- Check for injuries
- Call parents if necessary
- Allow child to rest or sleep
- Do not give anything to eat or drink until the child is fully awake and alert
- Remain with child until fully recovered
- Assist child to change clothing if necessary
- Child may complain of headache or be confused
Seizures do not always require urgent care.

**Call 911 immediately if:**
- The **person stops breathing** for longer than 30 seconds. After calling 911 begin rescue breathing/CPR.
- The **seizure lasts longer than 5 minutes**. (The person may have entered a life-threatening state of prolonged seizure called status epilepticus).
- **More than one** seizure occurs within 24 hours, the person has diabetes or is pregnant.
- This is the person's **first seizure**; or if you don't know if the person has epilepsy.
- **Serious injuries** have occurred.
What the family is responsible for?

- Giving specific information about the student
- Consulting with their Doctor and providing the school with an annual **Medical Alert Planning Protocol**
- Supplying labelled medications
- Making treatment decisions
- Ensuring student is wearing a Medic Alert bracelet at all times
- Communicating with the school especially when there is a significant medical change with the student
1. Ensuring that school staff are aware of:
   - which students have seizures
   - seizure management protocol and seizure first aid
   - School District policy regarding medical conditions at school.

2. **Medical Alert Planning and Request for Medication forms** have been received from the family.

3. **Safely storing** the student’s labelled medications.

4. **Documenting** seizures in a seizure record.

5. **Communicating** with the family.
Any Questions?

Please visit the Interior Health website www.interiorhealth.ca
http://www.interiorhealth.ca/YourHealth/SchoolHealth/SchoolMedicalConditions/Pages/default.aspx

for more information.