# Patient & Family Guide

# First Unprovoked Seizure



# First Unprovoked Seizure

Your health care provider has given you this pamphlet because they suspect you have had a seizure.

#### What is a seizure?

- A seizure happens when the nerve cells (neurons) in the brain don't discharge (fire) the right way. These discharges are like an "electrical storm" in the brain and can temporarily interrupt normal body function.
- A seizure can cause abnormal movements, sensations, or mental function, depending on which part(s) of the brain is involved.
- Seizures can happen for no obvious reason, or they can be caused by a number of different medical reasons, such as:
  - a major illness
  - a brain lesion (structural problem) or infection
  - > a brain bleed



 misuse or withdrawal from alcohol or other recreational drugs



SIGNIFICANT HEAD INJURY



BLEEDING OF THE BRAIN

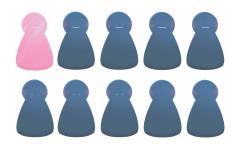


BRAIN LESION



ALCOHOL/ SOCIAL DRUGS

 Anyone can have a seizure and seizures can happen at any age. About 5 to 10% of people will have a seizure in their lifetime.



 In Nova Scotia, about 500 to 700 adults are referred to the First Seizure Clinic every year.

### What is an unprovoked seizure?

 A seizure is considered unprovoked when an assessment and investigation finds no clear, immediate cause.

- About half of the people who have an unprovoked seizure will not have any more seizures. The other half will have another seizure, often within 6 months of the first one.
- Having one seizure does not mean that you have epilepsy. Most people who have a first unprovoked seizure do not need treatment.

# What will happen after my first seizure?

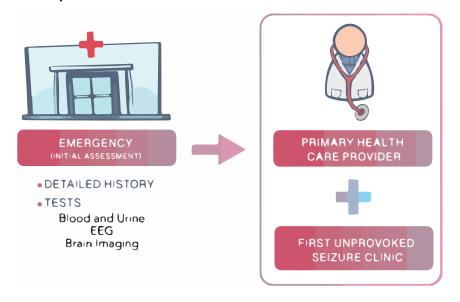
- If you have had a suspected first seizure, you should go to the nearest Emergency Department for further assessment.
- Immediate assessments may include:
  - a detailed history of the event and what happened before the event (such as a loss of consciousness or an event with abnormal movements, sensations, or mental function)



- a physical exam for any ongoing neurological problems
- > blood and urine (pee) tests
- an ECG (electrocardiogram). This is a recording of your heart rhythm for 10 seconds.
- brain imaging (such as a CT scan)

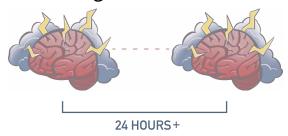


 If these tests do not show any concerning findings and you have recovered from the seizure, you will be discharged from the Emergency Department. You should then follow up with your primary health care provider. You may also be referred to the First Unprovoked Seizure Clinic.

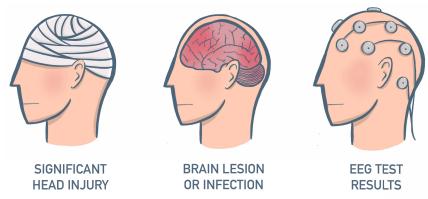


# What is epilepsy?

- Epilepsy is a medical condition that makes a person more likely to have unprovoked seizures.
- Epilepsy is diagnosed if you have 2 or more unprovoked seizures more than 24 hours (1 day) apart. Epilepsy is also diagnosed if you have a single unprovoked seizure and are found to be at high risk for more seizures.



 You may be at a higher risk for more seizures if you have some types of brain lesions, have had significant brain injury, or an EEG (electroencephalogram) test shows findings associated with seizures.



- If assessment and investigations after your first seizure suggest you are at high risk for more seizures or have a diagnosis of epilepsy, you may be prescribed anti-seizure medication.
- Not every loss of consciousness or event with abnormal movements, sensations, or mental function is a seizure. If the event is not a seizure, it will be investigated and treated differently.

# What is a provoked seizure?

 Provoked seizures are seizures that have an immediate cause. This can include things like alcohol or drug misuse or withdrawal, or significant medical illnesses.



 For provoked seizures, the factors causing the seizures must be removed or treated.
 Most people with provoked seizures do not need followup with a neurologist (doctor who specializes in the nervous system).

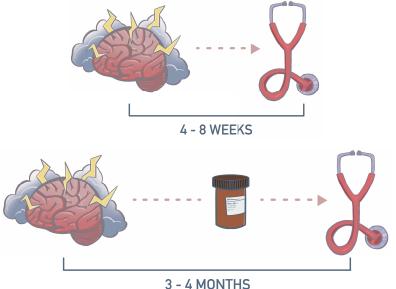
# First Unprovoked Seizure Clinic

#### Where is the Clinic?

Your appointment will either be at the Neurology Outpatient Clinic at the Halifax Infirmary or at the Cobequid Community Health Centre in Lower Sackville. The Clinic will let you know by mail or phone where your appointment will be.

#### What to expect at your appointment

 Appointments at the First Unprovoked Seizure Clinic are given based on urgency. We try to see people with unprovoked first seizures within 4 to 8 weeks of the event. If you have been started on an anti-seizure medication, your appointment will be about 3 to 4 months after the event.



- Your first appointment at the Clinic will take up to 90 minutes (an hour and a half). We will review your medical, family, and social history, and do a physical neurological exam.
- If someone witnessed your seizure, please bring them with you to your appointment so we can talk with them.
- We will ask for a detailed history of the seizure from you and your witness (if there was one). Getting a clear description of the event is one of the most important parts of trying to figure out if you have had a seizure. What the witness saw may be different from what you remember.

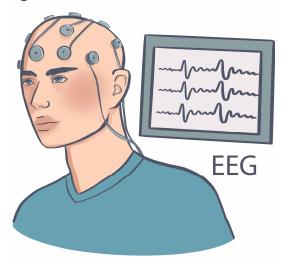
#### Record the details of the event

- Keeping a record of all the details of the event is very helpful. We will ask you things like:
  - How were you feeling before the event happened?
  - What were you doing before the event started?
  - How did you feel as the event happened?
  - > What do you remember about the event?
  - › How did you feel after the event?
  - > Were you injured, sore, or sleepy after the event?

- We will ask the witness things like:
  - What was the person doing before the event started?
  - Did the person mention any unusual feelings?
  - How did you know the person was having trouble?
  - Was the person confused or having any other trouble functioning?
  - Did the person collapse? What did that look like?
  - > Was there a change in the person's breathing or colour?
  - Did the person have any movements of their body or limbs (arms and legs)?
  - How long did the event last?
  - What was the person like after the event?
  - When was the person back to normal?

#### Tests that may be done

- Depending on your situation, you may have:
  - an EEG (electroencephalogram). This painless test gives info about the electrical activity of your brain. It looks for abnormal patterns that might suggest a higher risk for seizures.
  - a sleep-deprived EEG. This test is the same as a regular EEG, but it takes longer and is done after you have stayed awake for most of the night before the test.
  - further brain imaging with an MRI (Magnetic Resonance Imaging)
  - neuropsychological (thinking skills, such as attention, memory, and problem solving) testing



# How will having a seizure affect my life? Driving

 Seizures cause unpredictable episodes of impairment that make you suddenly unable to function normally. Because of this, your driving will be restricted for a time to make sure you don't have any more seizures.



- Even if you have started medication, your driving will be restricted for a time to make sure the medication is working to stop your seizures.
- In Nova Scotia, you must be seizure-free for at least 6 months before the Registry of Motor Vehicles (RMV) will consider allowing you to return to driving with a regular (class 5) licence. The rules are different for professional drivers with a commercial licence (classes 1-4).
- Being seen earlier in the Clinic does not change the driving restriction requirements.
- If you have another seizure, the 6 months starts again from the date of your most recent seizure.

If you have any questions, call the RMV's Medical Fitness Section at: 902-424-5732.

### Safety considerations

- After you have had a seizure, we recommend taking extra safety measures to lower the risk of injury to yourself and others:
  - > at heights (above 3 feet)
  - > around heavy machinery
  - > around open water







 We also recommend that you shower rather than having a bath.



 A good way to decide about the safety of an activity is to ask yourself: "If I had another seizure now, how likely is it that I would hurt myself or someone else?"

#### Lifestyle

Sometimes lifestyle choices can increase your risk of seizure. Being very sleep deprived and overusing or abusing alcohol or recreational drugs can increase your risk of seizure.

- Make sure you get enough sleep.
- Limit your use of alcohol and cannabis.
- Avoid other recreational drugs.

#### Work

- Depending on your type of work, you may need to talk about your suspected seizure with your employer or occupational health department. This is especially important if extra safety measures need to be taken to avoid injury to yourself or others.
- You will need to tell your employer if your job requires driving a vehicle of any kind (including trains) or flying a plane. Some jobs have specific requirements to report health issues such as seizures. These may include the Canadian Armed Forces or emergency services (such as police, firefighters, paramedics).

#### What if I have another seizure?

- In most cases, people do not have another seizure. Having a second unprovoked seizure usually shows a higher risk for more seizures. In this case, medication to prevent seizures is recommended.
- If you have a second unprovoked seizure, talk with your health care provider about starting anti-seizure medication.



#### **First Aid for Seizures**

- Stay calm. Most seizures only last a few minutes.
- Check the time so you know how long the seizure lasts.
- Prevent injury by moving any sharp or hard objects away from the person (such as eyeglasses).
- Loosen any tight clothing around the person's neck.
- DO NOT put anything in the person's mouth or between their teeth.
- DO NOT hold the person down or try to stop their movements.
- Make sure people do not crowd around the person.
- Once the seizure has stopped, turn the person on their side in the recovery position (see image).
- Stay with the person until they are fully recovered and aware of their surroundings.
- Do not give the person anything to eat or drink until they are fully alert.
- Reassure and support the person.

#### Call 911 if:

- the seizure lasts for more than 5 minutes.
- a second seizure follows the first one without the person getting back any awareness in between.
- the person has been injured or is having trouble breathing after the seizure.

#### For more information:

#### Canadian Epilepsy Alliance

- Phone (toll-free): 1-866-EPILEPSY (1-866-374-5377)
- > www.canadianepilepsyalliance.org/

### **Epilepsy Association of the Maritimes**

- > Phone: 902-429-2633
- > Toll-free: 1-866-374-5377
- https://epilepsymaritimes.org/

### **Epilepsy® Foundation**

- > Phone (toll-free): 1-800-332-1000
- https://www.epilepsy.com/

Notes:			

# What are your questions? Please ask. We are here to help you.

In Nova Scotia you can call 811 to talk with a registered nurse about your health care questions 24/7.

#### Looking for more health information?

Find this pamphlet and all our patient resources here: http://library.nshealth.ca/PatientGuides
Contact your local public library for books, videos, magazines, and other resources.

For more information, go to http://library.novascotia.ca

Connect with a registered nurse in Nova Scotia any time: call 811 or visit https://811.novascotia.ca Learn about other programs and services in your community: call 211 or visit http://ns.211.ca

Nova Scotia Health Authority promotes a smoke-free, vape-free, and scent-free environment.

Please do not use perfumed products. Thank you!

www.nshealth.ca

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If you have any questions, please ask your health care provider.

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The information in this pamphlet is to be updated every 3 years or as needed.

