Seizures After Traumatic Brain Injury (TBI)

Days after getting a TBI in a car crash, Seneca had a seizure. It happened during rehab at an American Indian Health Center.

One out of 10 people who are hospitalized after a TBI will have a seizure.

Most seizures happen in the first few days or weeks after a TBI.

But some may occur months or even years after a TBI.

Before the seizure, Seneca had some signs. He saw flashing colors and felt tired all of a sudden.

Along with changes in vision and sudden tiredness, other signs include:

- **Unusual movement of the head, body, arms, legs, or eyes.**
- **Unresponsiveness and staring.**
- **Chewing, lip smacking, or fumbling movements.**
- **Sudden experience of an odd smell or taste.**
- **Not being able to speak or understand others.**
- **New outbursts of anger or tearfulness.**

After his seizure, Seneca feels weak, tired, and a little confused.

Dr Sky tells Seneca that about 25% of people who have a seizure within 1 week of a TBI will have another one months or years later. Repeated seizures may be diagnosed as epilepsy.

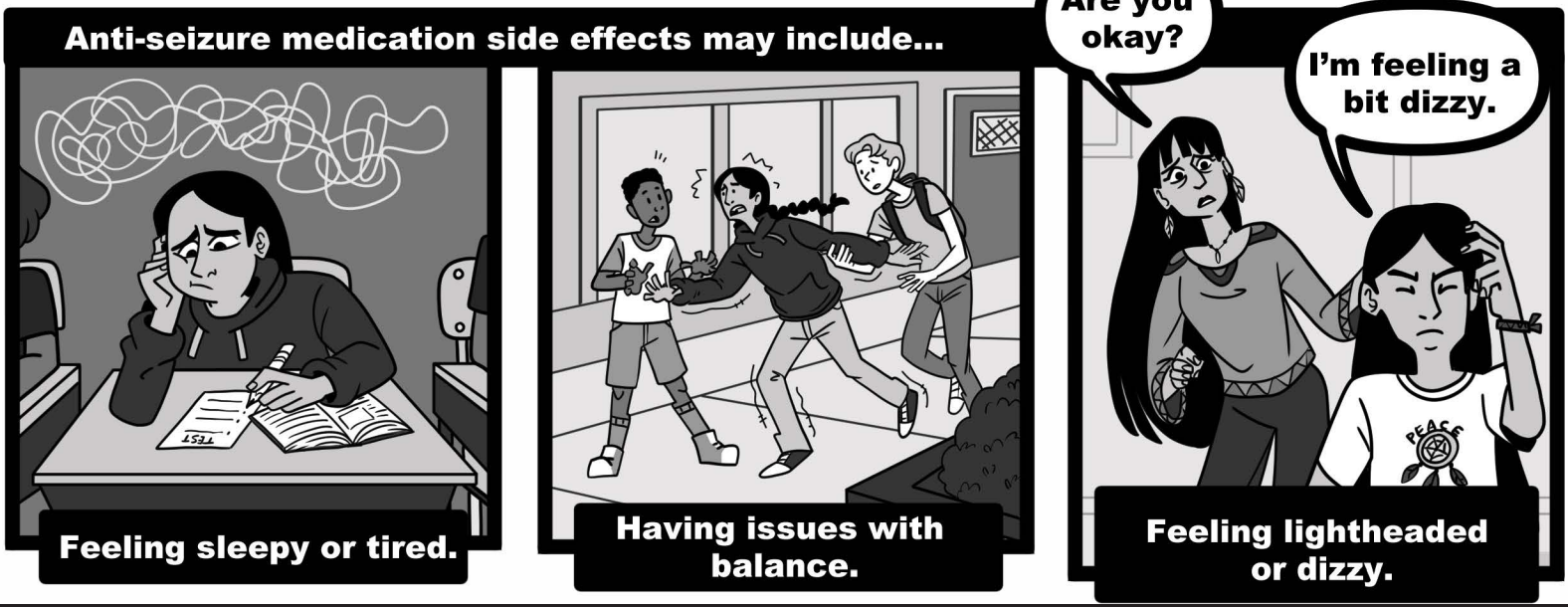
Because Seneca is at risk for seizures in the future, Dr. Sky tells him the things that can increase the risk of another one.

Risks for another seizure

Dr. Sky tells Seneca that he can take anti-seizure medicine to help control his seizures. Most people adjust well to their medication.

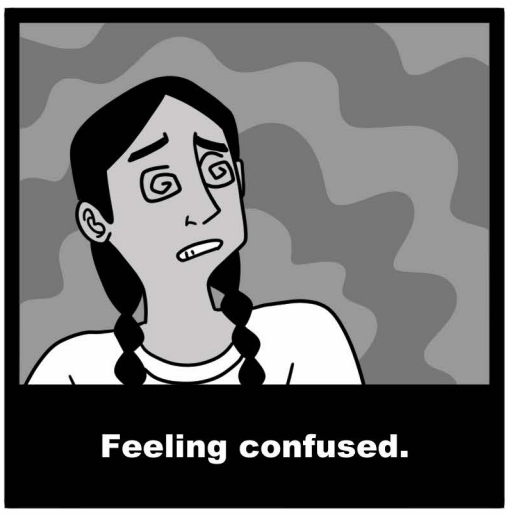
If a medication is causing persistent side-effects, the physician may be able to prescribe another medication.

Anti-seizure medication side effects may include...



Trembling.

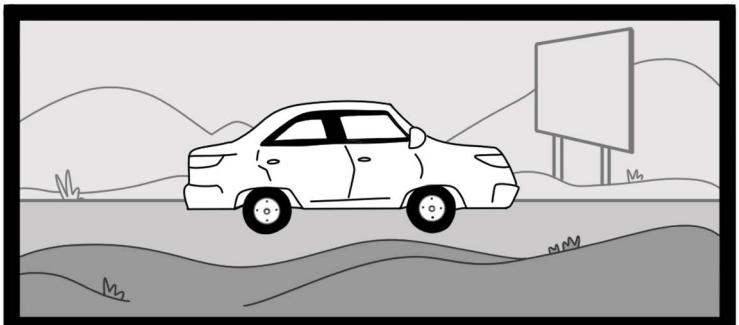
Double vision.



Feeling confused.

Dr. Sky tells Seneca that anti-seizure medicines usually work. But if they don't, he may need to go to a comprehensive epilepsy center for more tests.

Dr. Sky tells Seneca there are safety issues that he needs to be aware of if he keeps having seizures.



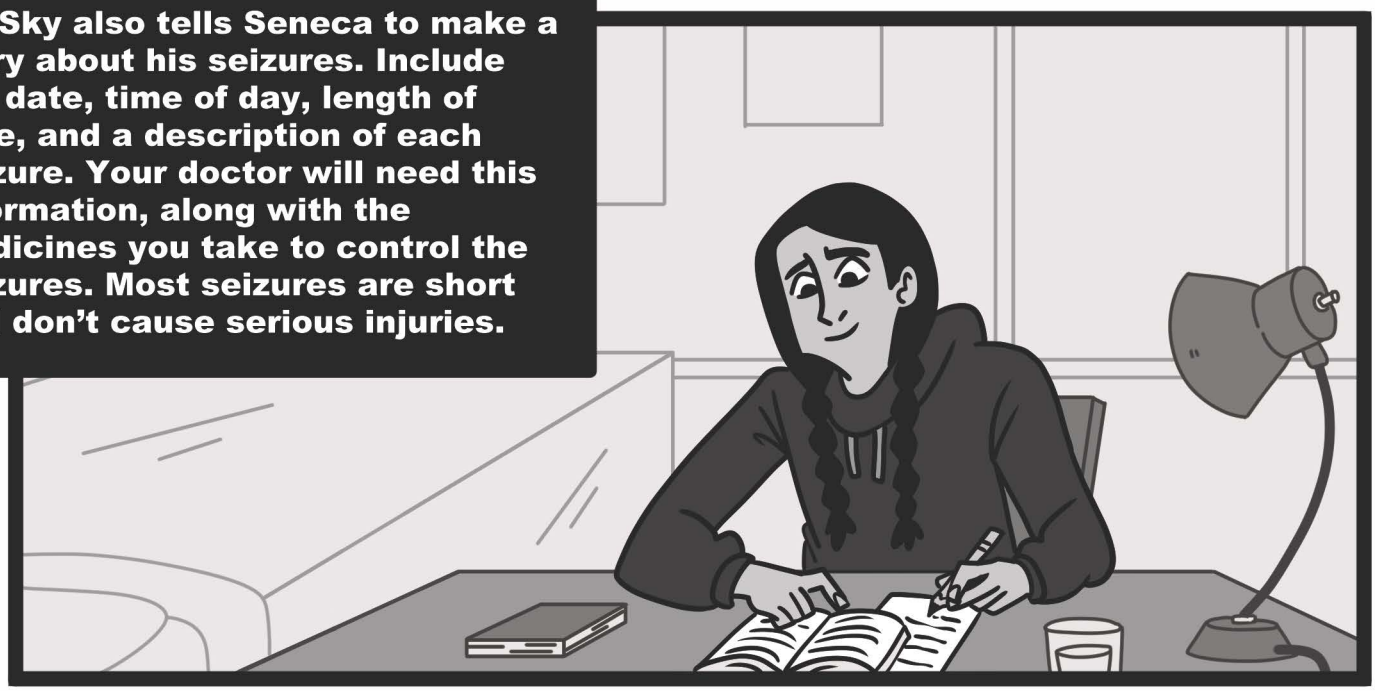
In most states, you can't drive for a certain amount of time after a seizure. You must tell the department of motor vehicles about your seizure.

You should not operate heavy equipment or power tools unless your doctor says it's OK.

Don't climb on ladders, trees, roofs, or other tall objects.

You should always have someone with you when you are in the water.

Dr. Sky also tells Seneca to make a diary about his seizures. Include the date, time of day, length of time, and a description of each seizure. Your doctor will need this information, along with the medicines you take to control the seizures. Most seizures are short and don't cause serious injuries.



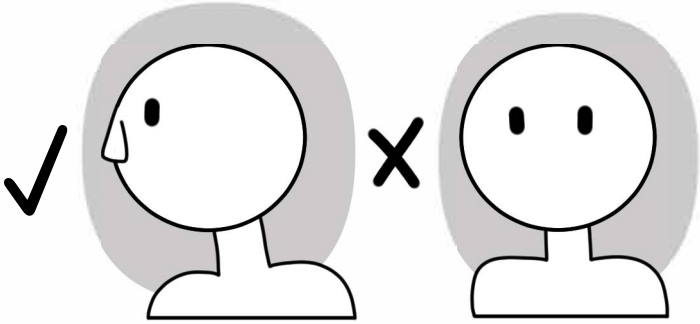
A Pocket Guide for Caregivers About Seizures

1. Loosen tight clothing, especially around the neck.

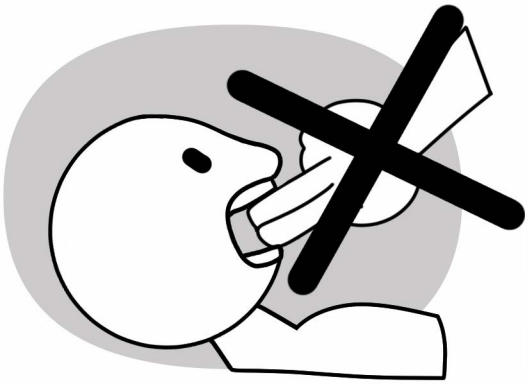
2. Make sure the person doesn't fall.

- Hold the person steady if he or she is on a chair, couch, or bed.
- If the person is standing, get them to the ground safely.

3. Turn the person and their head to the side so that anything in their mouth, even spit, doesn't block the throat.



4. Don't put anything in the person's mouth; you may get bitten.



5. If you know cardiopulmonary resuscitation or CPR, check the heartbeat in the neck.

- If there is no pulse, start CPR. Call 911.

6. Listen for breathing at the mouth.

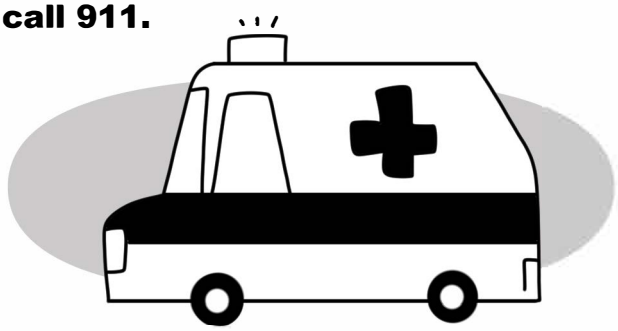
- Extend the person's neck if they are having a hard time breathing.
- If the person isn't breathing, start CPR. Seal your lips over the person's mouth and breathe two quick breaths.
- Seal your lips over the person's mouth and breathe two quick breaths.
- Continue breathing into their mouth every 5 seconds until the person starts breathing on their own.
- Call 911.

7. If this is the first seizure after a TBI, call the person's doctor for advice.

8. IF THE SEIZURE DOES NOT STOP AFTER 3 MINUTES, CALL 911.

9. If the seizure stops within 3 minutes, call the person's doctor.

10. If the person doesn't return to normal within 20 minutes after the seizure, call 911.



Source: The content of this infocomic was adapted from the factsheet entitled *Seizures After Traumatic Brain Injury*, which was originally developed by Jeffrey Englander, MD, David X. Cifu MD, Ramon Diaz-Arrastia MD, and Alan Towne, MD and was updated by David X. Cifu MD, Ramon Diaz-Arrastia MD, and Alan Towne, MD, in collaboration with the Model Systems Knowledge Translation Center (https://msktc.org).

Disclaimer: This information is not meant to replace the advice of a medical professional. You should consult your health care provider regarding specific medical concerns or treatment. The contents of the infographic were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number 90DPKT0008). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this infographic do not necessarily represent the policy of NIDILRR, ACL, or HHS, and you should not assume endorsement by the Federal Government.

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Traumatic Brain Injury
Resource Bundle
for American Indians