



Seizure Individualized Health Plan

EISD Rev. 5/18

Student Name: _____

Date of Birth: _____

Table with 13 columns: Annual Review, Parent Review, Seizure care plan received, and 12 columns for Date and Initials.

Assessment data: (from Parent/Guardian/Student/Physician)

- Assessment data items including: EISD seizure protocol signed by doctor, emergency contacts, medication allergies, age of onset, seizure type, seizure control medication, emergency plan, emergency seizure medication, Vagus Nerve Stimulator (VNS), needs during school, equipment needs, diet, activity restrictions, transportation, and after-school care.

(Nurse: Select from the following diagnoses and care plans. Delete any that do not apply. Delete parenthetical instructions.)

Nursing diagnosis: Potential for injury related to seizure activity

Goal: Minimize risk of injury and provide proper first aid

Action:

- Action items: 1. Monitor for seizures. 2. Document all seizure activity. 3. Prevent injury and provide first aid (a-e).

- f. Do not force anything between the teeth or place any object in the mouth.
 - g. Do not give fluids or food during or immediately after the seizure.
 - h. Loosen restrictive clothing.
 - i. Stay calm. Reassure the student that you are there and will take good care of him/her.
 - j. Observe for injuries, difficulty breathing, change in color of lips or skin (ashen, dusky or blue), and the length of the seizure (in minutes)--note the time on the clock at the beginning and end of the seizure.
4. **If the seizure lasts longer than 5 minutes or if the student is not breathing, it is an emergency.**
- a. **Ask the front office to call EMS (911). Do not call EMS from your cell phone unless there is no alternative.**
 - b. Follow EISD Seizure Protocol (Physicians Orders for Seizures at School). Administer medication as prescribed.
 - c. When a seizure is finished, the student may be sleepy. That is normal. Provide a comfortable, private place for rest where he/she can be observed. Tell the student where he/she is, what time it is and what happened.
 - d. Notify parent and school nurse of any seizure activity or injury.
 - e. Document seizure activity in the seizure log: when it occurred, how long it lasted, what you did, when you notified a parent, any injury or unusual occurrence

□ **Nursing diagnosis: Potential for side effects due to seizure medication**

Goal: Early recognition and reporting of side effects

Action:

1. Observe for the following side effects and report them to a parent: drowsiness, insomnia, skin rash, nausea and vomiting or constipation, slurred speech, double vision, appetite loss, fatigue, lack of coordination, headache, unusual bleeding or bruising, hair loss, tremors, yellow skin (depakote), muscle twitching (dilantin), increased hairiness (dilantin), gum overgrowth (dilantin)
2. Potential side effects
 - a. **Trileptal (oxcarbazepine):**
 - i. The most common side effects include: dizziness, sleepiness, double vision, tiredness, nausea, vomiting, problems with vision, stomach pain, trembling, upset stomach, unsteadiness, rash, infections (especially in children)
 - ii. Low blood sodium levels that cause nausea, tiredness, headache, confusion, more frequent or severe seizures
 - iii. Call school nurse right away if she has any of the following side effects:
 1. swelling of face, eyes, lips or tongue, trouble swallowing or breathing, hives or a skin rash,
 2. fever, swollen glands or sore throat that persists or comes and goes,
 3. painful sores in the mouth or around the eyes
 4. unusual bruising or bleeding
 5. severe fatigue or weakness
 6. severe muscle pain
 7. frequent infections or infections that do not go away
 - iv. Educational implications related to seizure control medication include dry mouth and lethargy, personality changes, hostility and uninhibited behavior, decreased test-taking ability, decreased motor performance, impairment of concentration-related memory, frequent use of the bathroom, hyperactivity, other: n/a
 - b. **Lamictal (lamotrigine)** can cause a very serious reaction called Stevens-Johnson Syndrome. It is necessary to slowly increase the dose of Lamictal to prevent this reaction, (severe skin rash), so it may take 6-8 weeks to reach the target dose. Serious rashes usually develop during the first 2 to 8 weeks of treatment with lamotrigine but can develop at any time during treatment. Notify the nurse immediately of any of the following symptoms: rash; blistering or peeling of the skin; hives; fever; swelling of the face, throat, tongue, lips, eyes, hands, feet, ankles, or lower legs; hoarseness; difficulty breathing or swallowing; nausea; extreme tiredness; unusual bruising or bleeding; lack of energy; loss of appetite; pain in the upper right part of the stomach; yellowing of the skin or eyes; flu-like symptoms; pale skin; headache; dizziness; fast heartbeat; weakness; shortness of breath; sore throat, fever, chills, and other signs of infection; dark red or cola-colored urine; muscle weakness or aching; or painful sores in mouth or around eyes. Notify the nurse if you observe any of the following side effects:
 - loss of balance or coordination
 - double vision
 - blurred vision

- uncontrollable movements of the eyes
 - difficulty thinking or concentrating
 - difficulty speaking
 - drowsiness
 - dizziness
 - diarrhea
 - constipation
 - loss of appetite
 - weight loss
 - stomach, back, or joint pain
 - missed or painful menstrual periods
 - swelling, itching, or irritation of the vagina
 - uncontrollable shaking of a part of the body
- c. **Neurontin (gabapentin)** It is not yet approved for use in children. Occasional blood tests are needed. Allergic skin reaction looks like a red, bumpy rash, usually on the face and trunk. Watch for tiredness, dizziness, and headache.
- d. **Topamax (topiramate) and Zonegran (zonisamide)** can cause sudden increased pressure in the eyes, redness in the eyes and severe pain. The student should be taken to the emergency room or ophthalmologist. Kidney stones have been reported on rare occasions with **Zonegran**.
3. **This student requires medication to be administered at school:** Yes No
- a. The school nurse must train school staff before they can give any medications.
 - b. Seizure medication must be given on time. Missed or late medication can lead to breakthrough seizures.
 - c. For medication that is missed or is later than 30 minutes from schedule, contact parent and school nurse immediately so that medication adjustments can be made.
 - d. Note administration of medication in Skyward.

This student is diagnosed with the following type(s) of seizure.

Focal Seizure

Focal seizure (until recently called simple partial seizure or complex partial seizure)

When an epileptic seizure starts in one side of the brain, it's called a focal-onset seizure or a focal seizure. Both terms mean the same thing. Until recently these seizures were called "partial seizures."

Types of Focal Seizure There are two main types of focal seizures:

1. Focal Aware Seizures
 - a. Until recently this type of seizure was called a **simple partial seizure**
 - b. The individual stays fully aware of what's happening around them.
2. Focal Impaired-Awareness Seizures
 - a. Until recently this type of seizure was called a **complex partial seizure**.
 - b. This type of seizure affects people's awareness of what is happening around them at some time during the seizure

Symptoms

What happens during a focal seizure depends on which part of the brain the seizure happens in. Different areas of the brain control movements, body functions, feelings and reactions. Symptoms are unique from individual to individual. Some people experience just one symptom during a focal seizure, while others experience several. The symptoms can be split into 2 groups. Symptoms that involve movement are called "motor symptoms," and symptoms that don't involve movement are called "non-motor symptoms."

1. **Motor Symptoms**

- Part of the body, for example one arm, going stiff
- Part of the body going limp or “floppy”
- Rhythmic jerking in part of the body
- Brief, irregular jerks in part of the body
- Head and eyes turning to one side
- Lip smacking, repeated swallowing or chewing
- A jerking movement that starts in one part of the body, usually the hand or face, then spreads bit by bit to other parts of the body
- Repeated movements such as rocking, pedaling or pelvic thrusting
- Undressing
- Running or walking

2. **Non-motor Symptoms**

- Feeling of fear, anxiety, anger or pleasure
- Changes to vision, hearing, smell or taste
- Feeling the sensation of being hot or cold
- Seeing or hearing things that aren’t there (hallucinations)
- Feeling like the body is distorted
- Feeling like part of the body is missing or doesn’t belong to the individual
- Changes to breathing, heart rate or skin tone
- Feeling like what’s happening has happened before (déjà vu)
- Difficulty processing language

Focal seizures are usually brief, lasting several seconds to 2 minutes. Focal-impaired seizures usually last between 1-2 minutes. What happens after a focal seizure varies from person to person. People often feel fine after a focal seizure and are able to get back to their normal activities right away. Others might feel confused or tired or need to sleep. Focal seizures may look like a blank stare followed by purposeless activity. People may seem unaware of their surroundings and or be unresponsive to verbal commands. Other signs may include mumbling, picking at their own or another person’s clothing, running or struggling, especially if restrained. Afterwards there may be no memory of these actions.

Goal: Prevent injury

Action: School staff members, trained by the school nurse, will monitor for seizure activity and provide first aid as needed.

- School staff should document all observed seizure activity in daily seizure log.
- If seizures are increasing, notify parent and school nurse.
- If student becomes sleepy after the seizure, notify parent and school nurse.
- Speak calmly and reassuringly to student
- Guide gently away from hazard.
- Do not grab roughly or abruptly, unless there is immediate danger.
- Do not restrain.
- Do not shout or expect instructions to be followed.
- Stay with student until he/she is aware of where and what is happening.
- Student should be allowed to participate in PE and other activities as doctor allows.

Absence seizure

Brief seizures, last only a few seconds, also called “petit mal” seizures. This is the most common type of seizure disorder in children. It can occur frequently throughout the day. If frequent, it can severely affect a student's learning. The student may stare into space as if daydreaming or have repetitive eye blinking, facial twitching, lip smacking, eye fluttering or eye rolling. The student will not respond when addressed. *(Add child-specific activities.)*

Problem: Absence seizure

Goal: Appropriate identification and reporting of seizure activity.

Action:

1. No emergency intervention is required for these seizures.

2. School staff should document all observed seizure activity in the seizure log.
 - a. If seizures are increasing, or if student becomes sleepy after the seizure, notify parent and school nurse.
 - b. Parents should be encouraged to share the school seizure log with student's doctor.
3. Student should be allowed to participate in physical education and other activity as doctor allows. *(Add child-specific information)* Activity restrictions should be reassessed at least annually.
4. School staff should offer patience and understanding. It is helpful to repeat questions. A gentle reminder of the task at hand can be helpful.

❑ Stimulus-induced seizures

In this type of seizure, the student induces the brief electrical discharge by: _____.

Student has brief seizures lasting approximately less than 5 seconds. It is possible that he/she will be momentarily unconscious or in a state of altered consciousness at that time. Student may occasionally flag his/her arm in front of his/her face.

Problem: Light sensitive or self-stimulation seizures

Goal: Appropriate identification and reporting of seizure activity

Action:

Possible triggers that should be avoided: bright lights, sunshine, possible stress, excitement, hair brushing *(Add child-specific information.)*

1. No emergency intervention is required for these seizures.
2. School staff should document all observed seizure activity in daily log.
3. If seizures are increasing, notify parent and school nurse.
4. If student becomes sleepy after the seizure, notify parent and school nurse.
5. Parents should be encouraged to report teacher's observations to student's doctor.
6. Student should be allowed to participate in physical education and other activity as doctor allows. *(Add child-specific information)* Activity restrictions should be reassessed at least annually.
7. School staff should offer patience and understanding. It is helpful to repeat questions. A gentle reminder of the task at hand can be helpful.

❑ Complex partial seizure

Currently referred to as Focal Seizure. Only one part of the brain is involved in this type of seizure. The student generally will have impaired consciousness. Symptoms are unique from individual to individual. Complex partial seizures may look like a blank stare followed by purposeless activity. Student may seem unaware of surroundings and unresponsive to verbal commands. Other signs include mumbling, picking at own or others clothing, running, struggling, especially if restrained. Afterwards there is no memory of actions. *(Add child specific activities.)*

Problem: Complex partial seizures (focal seizure)

Goal: Prevent injury.

Action:

1. School staff members, trained by the school nurse, will monitor for seizure activity and provide first aid as needed.
 - a. School staff should document all observed seizure activity in daily seizure log.
 - b. If seizures are increasing, notify parent and school nurse.
 - c. If student becomes sleepy after the seizure, notify parent and school nurse.
2. No first aid is required for this seizure.
 - a. Speak calmly and reassuringly to student
 - b. Guide gently away from hazard.
 - c. Do not grab roughly or abruptly, unless there is immediate danger.
 - d. Do not restrain.
 - e. Do not shout or expect instructions to be followed.
 - f. Stay with student until he/she is aware of where and what is happening.
3. Student should be allowed to participate in PE and other activities as doctor allows. *(Add child-specific information)*

❑ Febrile seizures

Febrile seizures are seizures that are associated with an illness where the child has a fever. They rarely develop into a disorder where they have on going seizures, as in epilepsy, and usually go away without any treatment. They are the most common

seizures in children under five years of age and have an excellent prognosis. Febrile seizures are age dependent and usually occur between the ages of six months to three years of age. *(Add child-specific information.)*

Generalized seizures (Tonic-Clonic, Myoclonic, Infantile, Akinetic), also known as grand mal seizures

This disorder is characterized by loss of consciousness followed by stiffening for few seconds (tonic phase) then followed by period of jerking (clonic phase). As a rule, these seizures last from less than a minute to three minutes. After the seizure, a period of deep sleep occurs (postictal stage) lasting from minutes to hours. *(Add child-specific information)*

Lennox Gastaut Syndrome

Lennox-Gastaut syndrome is a form of severe epilepsy that begins in childhood. It is characterized by multiple types of seizures and intellectual disability. Developmental arrest or regression can occur after the onset of these seizures. People with Lennox-Gastaut syndrome begin having frequent seizures in early childhood, usually between ages 3 and 5. More than three-quarters of affected individuals have tonic seizures, which cause the muscles to stiffen (contract) uncontrollably. These seizures occur most often during sleep. Also common are atypical absence seizures, which cause a partial or complete loss of consciousness. Additionally, many affected individuals have drop attacks, which are sudden episodes of weak muscle tone. Drop attacks can result in falls that cause serious or life-threatening injuries. Most of the seizures associated with Lennox-Gastaut syndrome are very brief. However, more than two-thirds of affected individuals experience at least one prolonged period of seizure activity known as nonconvulsive status epilepticus. These episodes can cause confusion and a loss of alertness lasting from hours to weeks. *(Add child-specific information)*

Simple partial seizure (focal seizure)

Currently referred to as Focal Seizure. Only one part of the brain is involved in this type of seizure. The student is aware of the seizure because consciousness is not impaired. Some symptoms include hand or mouth movement, head or eyes turned to the side, a pins and needles sensation, feeling of numbness, or hearing noises. *(Add child-specific symptoms.)*

Atonic seizures, also known as "drop attacks"

These seizures consist of sudden loss of postural tone and consciousness. They may be very brief, in which case a sudden drop of the head or sudden fall may be the only manifestation. More prolonged attacks may begin with a fall, but the student then remains limp and unresponsive for seconds or minutes. The more prolonged atonic seizures are usually followed by postictal drowsiness, which helps to distinguish them from these other conditions. *(Add child-specific information)*

Rolandic seizures

These seizures are characterized by partial seizures that usually occur at night and often involve the face and tongue; the seizures may progress to tonic-clonic seizures, are easily controlled with medications, but may not require treatment. *(Add child-specific information)*

Jacksonian Seizures

Jacksonian seizures are brief alteration in movement, sensation or nerve function caused by abnormal electrical activity in a localized area of the brain. Seizures of this type typically cause no change in awareness or alertness. They are usually brief. Jacksonian seizures are extremely varied and may involve, for example, turning the head, eye movements, smacking the lips, mouth movements, drooling, rhythmic muscle contractions in a part of the body, abnormal numbness, tingling, and a crawling sensation over the skin. *(Add child-specific information)*

The following treatment(s) is prescribed for this student.

Ketogenic diet for seizure treatment

The ketogenic diet is a high fat, adequate protein, low carbohydrate diet designed to mimic many of the biochemical changes associated with prolonged starvation. For some children whose epilepsy could not be controlled by medications, beneficial effects of prolonged fasting have been found. The ketogenic diet should only be used under the supervision of a physician and a dietician. *(Add child-specific information)*

Problem: Ketogenic diet

Goal: Dietary compliance

Action:

1. Student must eat and drink only what is provided from home.
2. Student is on _____ calories a day.

(For the Nurse: (Add child-specific information) Calories are restricted and depend on the age and activity of the child. If properly calculated, the child should neither gain nor lose significant weight, but should grow normally for his/her stature and the weight should remain close to the ideal weight for height. If the child is overweight, calories are limited until the ideal body weight is approached. The diet provides approximately 90 per cent of the child's caloric requirement as fat (cream, butter, and mayonnaise), one gram per kilogram of body weight as protein, and minimal carbohydrate intake.)

3. Student is limited to _____ of fluid a day
4. Student's diet is supplemented with vitamins and calcium.

(For the Nurse: (Add child-specific information) When the metabolic effects of diabetes were being studied, it was noted that the biochemical effects of fasting could be mimicked by eating a diet high in fat, but with insufficient carbohydrate to completely 'burn' the fats. The resulting 'ash' from the incompletely burned fat consisted of ketones in the blood. The mechanism(s) by which these ketone bodies, principally beta hydroxybutyric acid, aids control of seizures in children remains unknown even today.)

Vagus Nerve Stimulator (VNS) for seizure treatment

This device gives short bursts of electrical energy to the brain via, a large nerve in the neck, the vagus nerve. The stimulator is a battery, about the size of a silver dollar, which is surgically implanted under the skin, usually on the chest. Wires are threaded under the skin and attached to the vagus nerve. The physician can program the device to deliver small electrical stimulation bursts every few minutes. The Vagus Nerve Stimulator may be tried when medications fail to stop seizures. *(Add child-specific information)*

Problem: Vagus Nerve Stimulator

Goal: Early recognition and reporting of side effects

Action:

1. Student has a Vagus Nerve Stimulator. If student feels a seizure coming on, he/she can activate the discharge by passing a small magnet over the battery. Sometimes, this has the effect of stopping the seizure.
2. It is also possible to turn the device off by holding the magnet over it.
3. Side effects of VNS therapy are mostly hoarseness and, sometimes, discomfort in the throat. There may be a change in voice quality during the actual stimulation.

I have been given the opportunity to read and modify this individualized health plan for my child.

Parent Signature

Date

School Nurse Signature

Date

Additional resources:

<http://www.epilepsy.org.uk/info/ketogenic.html>

<http://www.epilepsyfoundation.org/>