



School Nursing Evidence-Based Clinical Practice Guideline: STUDENTS WITH SEIZURES AND EPILEPSY CPG IMPLEMENTATION TOOLKIT

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INTAKE FORM FOR INDIVIDUALIZED HEALTH PLAN FOR SEIZURES/EPILEPSY

School Name _____

School Year _____

Student Information

Name: _____ Age: _____ Date of Birth: _____

Physician(PCP): _____ Phone: _____

Physician(Specialist): _____ Phone: _____

Contact Information

Parent/Guardian 1: _____ Phone: _____

Parent/Guardian 2: _____ Phone: _____

Emergency Contact: _____ Phone: _____

Restraining orders or limitations in student contact? _____

Seizure Information

Seizures are caused by disturbances in the electrical activity of the brain. Seizures are classified in 3 groups: **Generalized**, **Focal** and **Unknown**. **Generalized**, which affects both sides of the brain or groups of cells on both sides of the brain at the same time. Types of seizures associated with this are tonic-clonic, absence, or atonic. **Focal** seizures can start in one area or group of cells in one side of the brain. This can include aware seizures (a person is awake and aware) or impaired awareness (a person is confused or their awareness is affected in some way). **Unknown** onset is when the beginning of a seizure is not known or not witnessed/seen by anyone. It may later be diagnosed as focal or generalized.

Seizure Type 1: _____ How long it lasts: _____

How often: _____ Date of last seizure: _____

What happens: _____

Seizure Type 2: _____ How long it lasts: _____

How often: _____ Date of last seizure: _____

What happens: _____

Triggers: ☐ lack of sleep ☐ flashing/bright lights ☐ stress ☐ poor eating ☐ caffeine
(check all that apply)

Other: _____

Device: ☐ No device
☐ Vagus Nurse Stimulator (VNS)
☐ Responsive Neurostimulation System (RNS)

Date implanted: _____

Medications

Daily Medications: _____ Dose: _____ Given: ☐ Morning ☐ Evening

_____ Dose: _____ Given: ☐ Morning ☐ Evening

_____ Dose: _____ Given: ☐ Morning ☐ Evening

Emergency Medication:

☐ Diazepam

Route: Diazepam rectal gel Dose: _____ Diazepam nasal spray Dose: _____

☐ Midazolam

Route: Midazolam nasal spray Dose: _____

☐ Other: _____

Diet

The student will follow: ☐ No special diet ☐ Ketogenic ☐ Low glycemic ☐ Modified Atkins ☐ Other: _____

Transportation

The student will: (choose all that apply)

☐ Ride the bus: Bus# _____ ☐ Parent Pick Up/Drop off ☐ Carpool with family ☐ Ride with Friend

Bus drivers will be notified of the student's seizure disorder. Parents are also encouraged to have a conversation with the driver. All bus drivers have been instructed to call transportation, 911 and parents for all emergencies according to school district policy.

Activities

Field Trips: The parent or teacher will notify the nurse of a field trip at least 2 weeks prior so a plan can be made. Parents are allowed to attend field trips with the student, but if unable to attend, the nurse will discuss the plan for the student and ensure the responsible adult is trained to assist the student if needed. If the student is prescribed an emergency medication, the medication will be sent with the responsible adult and instructed on use.

Physical Education: The student will participate in Physical Education unless otherwise noted by the physician of any limitations.

Activities Outside School Hours: Will the student be participating in before/after school activities? ☐ Yes ☐ No

If yes, what Activities: _____

Responsible Adult for Activities: _____

A **nurse is or is not available** (Indicate school policy) to care for students outside regular school hours.

If a school nurse is not available, it is the responsibility of the parent to:

- Notify the extracurricular responsible party of the student's medical needs
- Ensure your child has the appropriate supplies for the activity

Lockdown or Emergency Evacuation

The student will evacuate the building with classmates under the supervision of a teacher. Upon evacuation, the nurse will have emergency medications available if needed. In the case of a lockdown, the responsible adult would follow the emergency plan to ensure student safety until a nurse or emergency services is available.

General Information

- All teachers and staff will receive training on seizures _____ as required _____ as needed for those having direct contact with the student
- Nurses will notify the teachers of the student's seizures and provide an Emergency Action Plan

I give permission for the school nurse and any pertinent staff caring for my child to contact my licensed healthcare provider if necessary, and for this healthcare information to be shared with pertinent school staff per FERPA guidelines. I assume full responsibility for providing the school with prescribed medication.

Parent/Guardian Signature: _____ Date: _____

Nurse Signature: _____ Date: _____

EMERGENCY PLAN

In addition to basic seizure first aid, follow the student's attached seizure action plan.

If the student is having a seizure, the responsible person will:

- Call the school nurse for assistance
- Stay calm
- Start timing seizure
- Move furniture or items that may harm the student
- Turn student on side if not awake, but do not restrain
- Keep airway clear, don't put objects in mouth
- Place something flat and soft under student's head
- Stay with student until nurse arrives

Nursing Care

Once the nurse is notified of the student's seizure, the nurse will follow the orders as written by the physician on the Seizure Action Plan (SAP). The nurse will ensure:

- Student safety
- Maintain airway
- Continue timing seizure and make note of duration and type
- Notify parent or emergency contact
- Administer emergency medication if applicable
- Swipe magnet for VNS if applicable

Emergency Services (911) will be called if:

- If emergency medication is given as directed by seizure action plan
- Seizure with loss of consciousness longer than 5 minutes and not responding to emergency med
- Repeated seizures longer than 10 minutes, no recovery between them, not responding to emergency med
- Difficulty breathing after seizure
- Serious injury occurs or suspected, seizure in water

After Care

If the student regains consciousness and emergency services are not needed, the student may be allowed to rest and gently reorient as consciousness returns. The nurse will discuss with the parent whether the student should go home or return to class once able.

Parent #1 Phone: _____

Parent #2 Phone: _____

Emergency Contact (if parents not reached): _____

Parent Initials: _____

Nurse Initials: _____

CARE FOR STUDENTS WITH EPILEPSY IN THE SCHOOL SETTING CHECKLIST

- ☐ Review national, state, and local laws that may pertain to seizure management in schools and your state's nurse practice act.
- ☐ Review school and district policies, protocols, and procedures related to:
 - Seizure and epilepsy training, including seizure first aid training.
 - Medication administration to allow for delegation of rescue medication administration to UAP (if allowed per state/local policies), or plan for medication administration in absence of the school nurse.
- ☐ Complete student health history intake form. (see sample seizure / epilepsy intake form)
- ☐ Assess student access to a medical home and specialized care, including physical access to care and medical coverage.
- ☐ Assess family and caregiver knowledge, engagement, coping and compliance in caring for the student with seizures and epilepsy.
- ☐ Assess family and caregiver socioeconomic needs which may impact on the student's school attendance/performance.
- ☐ Assess impact on student's educational success (e.g., missed class time, participation in physical education, or extracurricular activities).
- ☐ Plan for communication with HCP/ written parent permission to exchange medical information (release of records) with healthcare provider(s).
- ☐ Complete intake/health history to establish student baseline seizure type and activity, including antecedents, presentation, frequency, and severity.
- ☐ Obtain your students Seizure Action Plan.
- ☐ Establish rescue medication accessibility, if indicated.
- ☐ Provide input for IEP or 504 plans.
- ☐ Assess for the presence of physical/medical co-morbidities, social/familial isolation, behavior/mental health concerns, and developmental/cognitive delays and disorders.
- ☐ Plan for medical emergency preparedness and response to include consideration of training and administration of emergency medications.
- ☐ Share student education programs if mandated or appropriate.

Resources

NASN has made available resources for school nurses supporting students with epilepsy in the school setting. The following sample forms: IHP, intake form, emergency action plan, and emergency intake form for students with seizures in the online toolkit called Supporting Students with Epilepsy: A Transition Toolkit for School Nurses found in the NASN learning center at <https://learn.nasn.org/courses/54876/sections/62945>

Epilepsy Training and First Aid

Epilepsy Foundation (2022). Seizure Training for School Nurses Care for Students (On Demand). <https://learn.epilepsy.com/courses/school-nurse-OD-v2a>

Epilepsy Foundation (2022). Seizure Training for School Personnel (On Demand). <https://learn.epilepsy.com/courses/school-personnel-OD-v2a>

Epilepsy Foundation (2022). Seizure Recognition and First Aid Certification (On Demand)- 90 minutes. <https://learn.epilepsy.com/courses/seizure-first-aid-cert-ondemand>

Seizure Action Plan (SAP) forms

Child Neurology Foundation Action Plan (2021). School Seizure Action Plan. (Fillable). https://www.childneurologyfoundation.org/wp-content/uploads/CNF_School_Action_Plan_fillable_2021.pdf

Epilepsy Foundation (2023). Living with Epilepsy: Seizure Action Plans. <https://www.epilepsy.com/preparedness-safety/action-plans>

Plans are available in English, Spanish, Chinese, Korean, Ukrainian, Vietnamese, & Tagalog.

SEIZURES/EPILEPSY, VAGAL NERVE STIMULATOR, AND RESPONSIVE NEUROSTIMULATION SYSTEM (RNS)

Thirty percent or more of people with epilepsy have seizures that do not respond to medications (Epilepsy Foundation, 2017). **A responsive neurostimulation system** is an Food and Drug Administration (FDA) approved treatment for focal and partial seizures in adults 18 years and older. It was designed for those who are anti-epileptic drug resistant and are not a candidate for surgery to remove the problem area of the brain (Epilepsy Foundation, 2017). One study showed that the RNS therapy is being used in some children/youth as young as 8 years old (Hartnett, et al, 2022). The RNS device is surgically placed in the cranium with wires that lead to the part(s) of the brain where seizures occur to stimulate the brain when seizure activity is detected (Epilepsy Foundation 2019). The RNS device monitors brain waves, detects unusual electrical activity, and immediately responds by giving small bursts of stimulation to return brain activity to normal (Epilepsy Foundation, 2017).

Patients are given a special magnet to swipe over their RNS during a seizure to record data to share with the doctor (Epilepsy Foundation, 2019). The school nurse role will be to utilize the magnet when needed and to train the school staff to do the same for both the RNBS and VNS devices.

Vagus Nerve Stimulation (VNS) Therapy® and Magnet Use

VNS therapy is used to treat drug resistant epilepsy and is approved to treat focal or partial seizures when medications are not effective. The VNS device is programmed to send mild electrical energy pulses to the brain via the vagus nerve, which may prevent or lessen the frequency of seizures. The VNS device is surgically implanted under the skin in the left chest area and a small wire is wrapped around the vagus nerve in the neck. Some people are aware of an oncoming seizure and can swipe the VNS magnet over the VNS generator on the left side of the chest. This sends an extra pulse of stimulation and may stop the seizure (Shafer & Dean, 2018).

Resources

NeuroPace RNS overview video - <https://www.youtube.com/watch?v=2QLvuVqfNsA>

References

- Epilepsy Foundation (2017). Responsive neurostimulation (RNS). <https://www.epilepsy.com/treatment/devices/responsive-neurostimulation>
- Epilepsy Foundation (2019). What is responsive neurostimulation (RNS). <https://www.epilepsy.com/stories/what-responsive-neurostimulation>
- Hartnett, S. M., Greiner, H. M., Arya, R., Tenney, J. R., Aungaroon, G., Holland, K., Leach, J. L., Air, E. L., Skoch, J., & Mangano, F. T. (2022). Responsive neurostimulation device therapy in pediatric patients with complex medically refractory epilepsy. *Journal of neurosurgery. Pediatrics*, 1–8. Advance online publication.
- Shafer, P.O. & Dean, P.M. (2018). *Vagus nerve stimulation (VNS) therapy*. Epilepsy Foundation. <https://www.epilepsy.com/treatment/devices/vagus-nerve-stimulation-therapy>

SAMPLE ASSESSMENT OF VAGUS NERVE STIMULATOR (VNS) MAGNET SELF-CARRY/ADMINISTRATION

Student name: _____ Grade: _____

Physician: _____ Phone: _____

Parent/guardian name: _____ Phone: _____

Parent/guardian name: _____ Phone: _____

Special VNS magnet Instructions: _____

Requirements for Carrying a VNS magnet	Observation	
Seizure Action Plan, ECP/EAP returned	Yes	No
Student demonstrates correct administration of VNS magnet	Yes	No
Student verbalizes when to use VNS magnet	Yes	No
Student verbalizes the importance of not sharing magnet with others	Yes	No
VNS magnet is to be located with student at all times	Yes	No
Student agrees to report any symptoms and VNS magnet use	Yes	No
An additional VNS magnet is provided to the school office/clinic (Optional)	Yes	No

Comments: _____

If the student does not demonstrate safe use and storage of the VNS magnet, parent/guardian and physician should be notified and an alternate approach to VNS magnet management will need to be determined.

Nurse Signature: _____ **Date:** _____

Random Check for Student Possession of VNS magnet – Monthly ____ or Start of School Year and Mid-Year ____

Date					
Initials					
Yes/No					
Exp Date					
Comments					

Initials	Signature	Initials	Signature

SEIZURES/EPILEPSY – COMPONENTS OF POLICIES, PROTOCOLS, PROCEDURES AND SAMPLE POLICIES

Approximately 470,000 children ages 6-17 years old in the United States (US) have epilepsy, with a prevalence rate of 6.3/1,000 (Zack & Kobau, 2017; CDC, 2023). Children/youth spend much of their waking day at school (Dean et al, 2021). The American Academy of Pediatrics (AAP) recommends that school districts develop and maintain written policies and protocols for seizures (AAP, 2023).

Policies and protocols communicate expectations to school personnel. It is important that you know national and state laws and regulations and your state nurse practice act.

Components of policies and protocols:

- Training for nurses and school staff including about seizures/epilepsy, recognition, first aid, bullying prevention/response, stigma, frequency of training, documentation, and medication administration
- Absences due to seizures/epilepsy
- Notification of teachers and other staff (following FERPA) of students with a seizure disorder
- Routine seizure management (IHP)
- Emergency management (EAP/ECP, SAP)
- Medication administration policy and procedures (add medical Marijuana if approved in your state)
- Nursing delegation or administrative assignment to unlicensed assistive personnel (UAP), if laws and regulations and nurse practice act allow
- Procedures for field trips, the bus, and before- and after-school activities
- Facilitating inclusion in all school activities unless excluded per medical note
- Documentation
- Procedures for errors
- Use of written care plans (e.g., IHP, ECP, SAP)
- Maintaining a safe environment
- Medical emergency preparedness and response.

Sample Policies

Longview Public Schools, Longview, WA – *Accommodating Students with Seizure Disorders or Epilepsy, Policy # 3411*
<https://www.longviewschools.com/policy-procedure-posts/~board/policies/post/accommodating-students-with-seizure-disorders-or-epilepsy-3411p>

Missouri Consultants for Education. (2022). P 2876 Epilepsy / Seizure Disorder. <https://www.moconed.com/regulation.php?action=ind&pollID=2294&catID=3>

Northwest Educational District 189 (2022). 3411 – *Accommodating students with seizure disorders or epilepsy policy.*
<https://www.nwesd.org/policies/3411/>

South Wedby School District, WA - Accommodating Students with Seizure Disorders or Epilepsy, Policy # 3411 [https://www.boarddocs.com/wa/bgps/Board.nsf/files/C8MU9B7AEFE0/\\$file/Draft%20Policy%203411.pdf](https://www.boarddocs.com/wa/bgps/Board.nsf/files/C8MU9B7AEFE0/$file/Draft%20Policy%203411.pdf)

Sample Guidelines

Colorado Department of Education. (2023). Nursing Procedures. Seizures/Epilepsy. <https://www.cde.state.co.us/healthandwellness/nursingprocedures>

Maryland Department of Health (2023). Management of Students with Seizures: Maryland State School Health Services Guidelines April 2023. https://marylandpublicschools.org/about/Documents/DSFSS/SSSP/SHS/SHSGuidelines/Management_StudentsWithSeizures.pdf

National Association of School Nurses. (2023). *School nursing evidence-based clinical practice guideline: Students with seizures and epilepsy*.

References

American Academy of Pediatrics (2023) Seizure Management in Schools. <https://www.aap.org/en/patient-care/school-health/management-of-chronic-conditions-in-schools/seizure-management-in-schools/>

Centers for Disease Control and Prevention. (2023). Epilepsy in Schools. <https://www.cdc.gov/epilepsy/groups/schools.htm>

Colorado Department of Education, (2023). School Nursing and Health. Health Conditions and Care Plans. *Epilepsy/Seizures. Additional training tools*. https://www.cde.state.co.us/healthandwellness/snh_healthissues

Dean, P., O'Hara, K., Brooks, L., Shinnar, R., Bougher, G., & Santilli, N. (2021). Managing Acute Seizures: New Rescue Delivery Option and Resources to Assist School Nurses. *NASN school nurse*, 36(6), 346–354. <https://doi.org/10.1177/1942602X211026333>

Garrett, T. (2018). Moving an evidence-based policy agenda forward: Leadership tips from the field. *NASN School Nurse*, 33(3), 158-159. <https://doi.org/10.1177/1942602X18766481>

Longview Public Schools, Longview, WA – Accommodating students with seizure disorders or epilepsy, Policy # 3411 <https://www.longviewschools.com/policy-procedure-posts/~board/policies/post/accommodating-students-with-seizure-disorders-or-epilepsy-3411p>

South Wedby School District, WA - Accommodating students with seizure disorders or epilepsy, Policy # 3411 [https://www.boarddocs.com/wa/bgps/Board.nsf/files/C8MU9B7AEFE0/\\$file/Draft%20Policy%203411.pdf](https://www.boarddocs.com/wa/bgps/Board.nsf/files/C8MU9B7AEFE0/$file/Draft%20Policy%203411.pdf)

Zack, M. M., & Kobau, R. (2017). National and state estimates of the numbers of adults and children with active epilepsy–United States, 2015. *Morbidity and Mortality Weekly Report*, 66(31), 821-825. doi: <http://dx.doi.org/10.15585/mmwr.mm6631a1>

TRANSITION FOR STUDENTS WITH EPILEPSY: THE ROLE OF THE SCHOOL NURSE AND TRANSITION TOOLKIT

Transition for Students with Epilepsy: The Role of the School Nurse panel presentation is located in the National Association of School Nurses Learning Center at <https://learn.nasn.org/courses/55489>

School Nurses have the opportunity to empower students with epilepsy to succeed as they transition from pediatric to adult care. This presentation provides insight into the key functions of the school nurse in the transition process to adult care, and some points of focus to ensure a seamless transition.

Supporting Students with Epilepsy: A Transition Toolkit for School Nurses for School Nurses is located in the National Association of School Nurses Learning Center at <https://learn.nasn.org/courses/54876>

The toolkit is comprised of three sections:

- Transition of Care for Students with Epilepsy
- Supporting Students with Epilepsy in the School Setting
- Transition Tools



National
Association of
School Nurses



Seizure/Epilepsy IHPs, 504
Plans, IEPs, Seizure Action
Plans for School Nurses

Learning Outcomes

As a result of this training, the participant will be able to...



Describe how the section 504 of the Rehabilitation Act of 1973, and the Individuals with Disabilities Education Act affect students with seizures in schools.



Explain what an Individualized Education Program (IEP) and 504 accommodations are.



Identify the differences between an IEP, 504 accommodations, and an Individualized Healthcare Plan (IHP).

Why do we have all these plans?



Communication with...
Substitute nurses
Health aids or assistants
Faculty, Staff, & Beyond



Evidence-based best practice: Integral to care coordination & quality improvement

**Federal Laws – IDEA,
Section 504**



Documentation
Not just your care, your process



(Halbert & Yonkaitis, 2019)

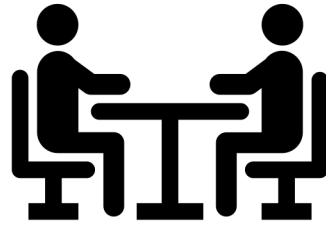
What school nurses need to know...

Federal, state, and local laws regarding children/youth with a disability as well as your state nurse practice act.

All schools must:



Identify students who have a disability or may be at risk of developing a disability



Refer the students for evaluation and complete a comprehensive evaluation



Develop an Individualized Education Plan (IEP) and implement that plan

What Do the Laws Say?

Section 504 of the Rehabilitation Act of 1973



Reasonable accommodations



Definition of handicapping conditions broader than for Individuals with Disabilities Education Act (IDEA)



Child Find Under Part B of IDEA – requirements for all students 3 –21 years



Free Appropriate Public Education (FAPE) in the least restrictive environment



Special education services – Individualized Education Program (IEP)



Related services (health services)

IDEA

(IDEA, n.d.)

(U.S. DHHS, 2020)

Non-Academic Services and Activities



Students must have an equal opportunity to participate in extracurricular and other non-academic services and activities.



Services (e.g., counseling, transportation, athletics, clubs, special interest groups, extracurricular field trips, meals, recess, health services and other activities sponsored by the school) must be provided in such a manner as is necessary to afford all students with disabilities an equal opportunity for participation.

IEP – Individualized Education Program

- Addresses the education needs of a child/youth with a disability.
- All public-school children/youth who receive special education and related services must have an Individualized Education Program (IEP).
- IEP must be a truly *individualized* document, specific to the child/youth.
- For an IEP to be effective, teamwork is essential.

(U.S. DoE, 2019)



The IEP Team Generally Includes:



School System Representative,
and Transition Services
Representative



Parent(s)/Guardian



Others with **knowledge or
special expertise about the
child/youth**



Regular Education Teacher



Person who can interpret
evaluation results



Special Education Teacher, and
Student as appropriate

(U.S. DOE, 2019)

The school nurse brings expertise regarding health conditions.

IEP Accommodations for a Child with Seizures/Epilepsy

Example: A student has medication-controlled epilepsy and has been diagnosed with a learning disability. The student has medication orders for administration each school day

The school nurse is the bridge that links the student's health needs and education making it possible for the student to achieve academic goals.



(Lightner, 2023)

Comparison

Individualized Education Plan

Covered by the educational law (IDEA); applies only to students that qualify for special educational services.

In a core curriculum area; follows strict procedures and timelines.

Parent involvement is mandated.

Schools receive limited additional educational funding for students receiving special educational services.

(IDEA, 2019)

Section 504 plan

1973 Rehabilitation Act; applies to all students with qualifying disabilities.

Follows an informal process

Parent involvement not mandated

Schools do not receive additional funding for services of qualifying students

Both plans cover:

Accommodations and modifications to the school environment and classroom materials, adaptive technology, and related services

(US DOE, 2023)

Purpose of Section 504 Plan



To protect the rights of individuals with disabilities in programs and activities that receive federal financial assistance.



The two main principles of Section 504:

- Nondiscrimination
- Accessibility (not only academics) to FAPE



To provide consistency between classrooms, grades, buildings and districts.



To document the district's compliance.

504 Accommodation Plans

- For students with special healthcare needs that do not fall under special education law.
- Purpose is to remove barriers to learning.
- Ensure that all students have access to education.
- Nurse often identifies the need and recommends how school can accommodate.
- Is a team decision and needs to be in writing.
- Needs to be reviewed at least annually.



Sample 504 Accommodations Seizures/Epilepsy

Sample Child/Youth Has Drug Resistant Epilepsy

- Extended time for tests/assignments due to academic time missed/absences due to seizures and recovery post seizures.
- Written notes/study guides
- Extra copies of textbooks/materials to keep at home
- Shortened or chunked assignments
- Elevator access due to risk of falling during a seizure.
- Being exempt from certain physical activities as directed by a doctor (e.g., swimming)
- Access to a place to rest after a seizure

Individualized Healthcare Plan

- An IHP is a written nursing care plan which is designed to meet the needs of a child/youth with a health condition that reflects a standard of care.
- The plan is written by the school nurse, using nurse language, for use by the school nurse and is developed by using the nursing process.
- Should be developed with child/youth and parent input.
- Measurable goals that are child/youth-oriented.
- Should be updated minimally on an annual basis
- Your IHP's can assist you in developing the child/youth's Emergency Care/Action Plan.

(Galemore & Sheetz, 2015)

A sample intake form for developing an IHP for seizures/epilepsy can be found in the Supporting Students with Epilepsy: A Transition Toolkit for school Nurses at <https://learn.nasn.org/courses/54876>

Click on **Supporting Students with Epilepsy in the School Setting** then

RESOURCES FOR SUPPORTING STUDENTS WITH EPILEPSY IN THE SCHOOL SETTING



Seizure Emergency Action/Emergency Care Plan Details:

Specific to condition (seizure / epilepsy).

Must be written and accessible

Parent responsible for supplying equipment, medication, information, etc.

Based on student-specific information

Must be updated annually and as needed for changes in condition/status

SEIZURE ACTION PLAN (SAP)



END EPILEPSY

Name: _____ Birth Date: _____
Address: _____ Phone: _____
Parent/Guardian: _____ Phone: _____
Emergency Contact/Relationship: _____ Phone: _____

Seizure Information

Seizure Type	How Long It Lasts	How Often	What Happens

Protocol for seizure during school (check all that apply) ☒

- ☐ First aid – **Stay. Safe. Side.**
- ☐ Give rescue therapy according to SAP
- ☐ Notify parent/emergency contact
- ☐ Contact school nurse at _____
- ☐ Call 911 for transport to _____
- ☐ Other _____

+ First aid for any seizure

- ☐ **STAY** calm, keep calm, **begin timing seizure**
- ☐ Keep me **SAFE** – remove harmful objects, don't restrain, protect head
- ☐ **SIDE** – turn on side if not awake, keep airway clear, don't put objects in mouth
- ☐ **STAY** until recovered from seizure
- ☐ Swipe magnet for VNS _____
- ☐ Write down what happens _____
- ☐ Other _____

When to call 911

- ☐ Seizure with loss of consciousness longer than 5 minutes, not responding to rescue med if available
- ☐ Repeated seizures longer than 10 minutes, no recovery between them, not responding to rescue med if available
- ☐ Difficulty breathing after seizure
- ☐ Serious injury occurs or suspected, seizure in water

When to call your provider first

- ☐ Change in seizure type, number or pattern
- ☐ Person does not return to usual behavior (i.e., confused for a long period)
- ☐ First time seizure that stops on its' own
- ☐ Other medical problems or pregnancy need to be checked

+ When rescue therapy may be needed:

WHEN AND WHAT TO DO

If seizure (cluster, # or length) _____

Name of Med/Rx _____ How much to give (dose) _____

How to give _____

If seizure (cluster, # or length) _____

Name of Med/Rx _____ How much to give (dose) _____

How to give _____

If seizure (cluster, # or length) _____

Name of Med/Rx _____ How much to give (dose) _____

How to give _____

Seizure Action Plan continued

Care after seizure

What type of help is needed? (describe) _____

When is student able to resume usual activity? _____

Special instructions

First Responders: _____

Emergency Department: _____

Daily seizure medicine

Medicine Name	Total Daily Amount	Amount of Tab/Liquid	How Taken (time of each dose and how much)

Other information

Triggers: _____

Important Medical History _____

Allergies _____

Epilepsy Surgery (type, date, side effects) _____

Device: ☐ VNS ☐ RNS ☐ DBS Date Implanted _____

Diet Therapy ☐ Ketogenic ☐ Low Glycemic ☐ Modified Atkins ☐ Other (describe) _____

Special Instructions: _____

Health care contacts

Epilepsy Provider: _____ Phone: _____

Primary Care: _____ Phone: _____

Preferred Hospital: _____ Phone: _____

Pharmacy: _____ Phone: _____

My signature _____ Date _____

Provider signature _____ Date _____

Epilepsy.com

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Revised 01/2020 1305SRP/PAB/216



END EPILEPSY

https://www.epilepsy.com/sites/default/files/atoms/files/GENERAL%20Seizure%20Action%20Plan%202020-April7_FILLABLE_0.pdf

Seizure Emergency Care Plan and Medication Orders for School and Childcare Settings						
PARENT/GUARDIAN complete and sign the top portion of form.						
Child Name:	Birth date:	Parent/Guardian Contact:	Phone:			
Emergency Contact:	Phone:	School:	Grade:			
Triggers: <input type="checkbox"/> tiredness <input type="checkbox"/> flashing lights <input type="checkbox"/> illness <input type="checkbox"/> hunger <input type="checkbox"/> temperature <input type="checkbox"/> Other: _____		Place child's photo here				
Seizure Aura (if any)						
Seizure history: <input type="checkbox"/> Convulsive <input type="checkbox"/> Focal <input type="checkbox"/> Absence Date of last known seizure _____						
Describe _____						
Antiseizure Medication Taken at Home		Common side effects				
Other Seizure Treatments/Special Diet Therapy:						
I give permission for school personnel to share this information, follow this plan, administer medication and care for my child and, if necessary, contact our health care provider. I assume full responsibility for providing the school with prescribed medication and devices. I approve this Seizure Emergency Care Plan for my child.						
PARENT SIGNATURE _____		DATE _____				
SCHOOL NURSE SIGNATURE _____		DATE _____				
		<input type="checkbox"/> 504 <input type="checkbox"/> plan <input type="checkbox"/> IEP				
HEALTH CARE PROVIDER to complete all items, SIGN and DATE completed form.						
IF YOU SEE THIS:		DO THIS:				
<input type="checkbox"/> Convulsive Generalized Tonic Clonic: You will see loss of consciousness. Stiffening of the body. Rhythmic jerking movements. Convulsive seizures may last 1-5 minutes. The child may have a warning (aura) before the seizure. Sleepiness and confusion may occur after the seizure.		1. Time the seizure 2. Keep calm. Provide reassurance. 3. Protect head, keep airway clear, turn on side if possible. 4. Do not place anything in mouth. 5. Call 911 if student is injured or has difficulty breathing. 6. Call parent. 7. Stay with student until recovered from seizure. 8. Administer rescue treatments as marked below.				
<input type="checkbox"/> Focal: These seizures may begin with an aura. They may be partly alert or unconscious. You may see lip smacking, chewing, eye blinking, or picking at clothes. These seizures usually last 1-2 minutes.		1. Time the seizure 2. Gently guide child away from danger. 3. Stay with student and reassure them until recovered from seizure. 4. Do not treat staring that is stopped by a touch or a nudge. 5. Call parent. 6. Administer rescue treatments as marked below.				
<input type="checkbox"/> Absence: You will see quick changes in alertness. May see eye flutter or small twitching. Usually last less than 10 seconds.						
Rescue Treatments						
<input type="checkbox"/> Child has a VNS. Child/staff may swipe with aura. Staff may swipe at onset of seizure and every 60 seconds until seizure stops. Give rescue medications below if seizure does not stop within _____ minutes.						
If seizure <u>lasts longer</u> than ____ minutes administer: <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td style="padding: 2px;"><input type="checkbox"/> Diastat ____mg rectally</td> <td style="padding: 2px;"><input type="checkbox"/> Midazolam ____mg in the nose</td> <td style="padding: 2px;"><input type="checkbox"/> Clonazepam ____mg in the cheek</td> </tr> </table>				<input type="checkbox"/> Diastat ____mg rectally	<input type="checkbox"/> Midazolam ____mg in the nose	<input type="checkbox"/> Clonazepam ____mg in the cheek
<input type="checkbox"/> Diastat ____mg rectally	<input type="checkbox"/> Midazolam ____mg in the nose	<input type="checkbox"/> Clonazepam ____mg in the cheek				
<input type="checkbox"/> Multistep seizure rescue plan – Please see attached letter for details.						
If <u>cluster</u> of ____ or more seizures in ____ min administer: <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td style="padding: 2px;"><input type="checkbox"/> Diastat ____mg rectally</td> <td style="padding: 2px;"><input type="checkbox"/> Midazolam ____mg in the nose</td> <td style="padding: 2px;"><input type="checkbox"/> Clonazepam ____mg in the cheek</td> </tr> </table>				<input type="checkbox"/> Diastat ____mg rectally	<input type="checkbox"/> Midazolam ____mg in the nose	<input type="checkbox"/> Clonazepam ____mg in the cheek
<input type="checkbox"/> Diastat ____mg rectally	<input type="checkbox"/> Midazolam ____mg in the nose	<input type="checkbox"/> Clonazepam ____mg in the cheek				
<input type="checkbox"/> Multistep seizure rescue plan – Please see attached letter for details.						
If emergency medication is administered: <input type="checkbox"/> Call 911 immediately or <input type="checkbox"/> Call 911 if seizure does not stop within 5 minutes						
Other: _____						
If no emergency medication is at school and the child is experiencing seizures: Call family to bring medications to school or pick up child. Call EMS if seizure lasts more than ____ min						
Accommodations: Always take seizure action plan and emergency medication for school activities, sports and field trips. Close adult supervision when swimming or climbing.						
HEALTH CARE PROVIDER SIGNATURE _____		PRINT PROVIDER'S NAME _____				
PHONE/FAX _____		DATE _____				

Emergency Action/Care Plan – Colorado Dept. Of Education

<https://www.cde.state.co.us/healthandwellness/seizureactionplanandmedicationorders-wordmay2019>

Call to Action!



Related NASN Position Statements



National Association of School Nurses.
(2023). *IDEIA and Section 504 Teams - The school nurse as an essential team member* (Position Statement). <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ideia>



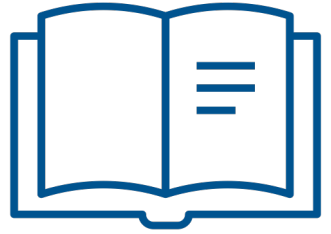
National Association of School Nurses.
(2020). *Use of individualized healthcare plans to support school health services* (Position Statement). Silver Spring, MD: <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ihps>

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- American Nurses Association and the National Association of School Nurses (2017). *School Nursing: Scope and Standards of Practice, 4th Edition*. Silver Springs, Maryland: ANA and NASN. ISBN-13: 979-8-218-01691-3
- Galemone, C. A., & Sheetz, A. H. (2015). IEP, IHP, and Section 504 primer for new school nurses. *NASN School Nurse*, 30(2), 85-88
- Epilepsy Association of Western and Central Pennsylvania (2023). Special Education; 504 Plan. <https://www.eawcp.org/programs/specialeducation/>
- Epilepsy Foundation, (2020). Seizure Action Plan. [Seizure Action Plans | Epilepsy Foundation](#)
- Individuals with Disabilities Education Act (2019). Section 1412: State Eligibility. <https://sites.ed.gov/idea/statute-chapter-33/subchapter-ii/1412>
- Individuals with Disability Education Improvement Act (2004), 20 U.S.C. 1400 et seq [About IDEA - Individuals with Disabilities Education Act](#)
- Lightner, L. (2023). Epilepsy IEP and 504 Plans, Accommodations, examples. <https://adayinourshoes.com/seizure-action-plan/#h-iep-accommodations-for-epilepsy>
- Manual for School Health Programs (2014). <https://health.mo.gov/living/families/schoolhealth/pdf/ManualForSchoolHealth.pdf>

References



- National Association of School Nurses. (2023). *IDEIA and Section 504 Teams - The school nurse as an essential team member* (Position Statement). <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ideia>
- National Association of School Nurses [NASN]. (2016). Framework for 21st century school nursing practice: National Association of School Nurses. *NASN School Nurse*, 31(1), 45-53. doi: 10.1177/1942602X15618644 [Framework for 21st Century School Nursing Practice - National Association of School Nurses \(nasn.org\)](https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ihps)
- National Association of School Nurses. (2020). *Use of individualized healthcare plans to support school health services* (Position Statement). Silver Spring, MD: <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ihps>
- Rehabilitation Act of 1973, 29 U.S.C. § 701 (1973). [The Rehabilitation Act of 1973 | U.S. Equal Employment Opportunity Commission \(eeoc.gov\)](https://www.eeoc.gov/eeoc/lawsdocs/the-rehabilitation-act-of-1973/1973)
- Will, Susan I.S., Arnold, Martha, Zaiger, Donna Shipley. (2018) *Individualized Healthcare Plans for the School Nurse*
- U.S. Department of Education (2019). Guide to the individualized Education Program: The IEP Team. <https://www2.ed.gov/parents/needs/speced/iepguide/index.html#team>
- U.S. Department of Education. (2023). Free appropriate public education. [Free Appropriate Public Education under Section 504](https://www2.ed.gov/parents/needs/speced/iepguide/index.html#team)
- U.S. Department of Education, Office of Civil Rights (2023). Protecting Students with Disabilities. <https://www2.ed.gov/about/offices/list/ocr/504faq.html>

Any
Questions?



Thank You!

Your information goes here



SEIZURES AND EPILEPSY 504 PLAN

“Section 504 of the Rehabilitation Act of 1973 as amended through the Americans with Disabilities Amendment Act (ADAA) in 2008 established legal support for individuals with disabilities, including students in federally funded programs and activities such as schools. This federal civil rights law ensures that every student is entitled to a free and appropriate public education (FAPE; U.S. Department of Education, 2020). Under Section 504, FAPE provides a student with a physical or mental impairment that impacts one or more major life activities with related services and accommodations in the general education classroom. These services address the student’s individual educational needs to achieve equity with nondisabled students. A physical or mental impairment under Section 504 standards can be from a chronic disease or condition, a disability, or an injury and necessitates an evaluation by and input from a school nurse to determine if access to learning is impacted” (NASN, 2023a).

504 Plans ensure equitable student access to their educational environment. The students individualized plan might include accommodations to:

- Seizure/epilepsy training will be provided for all school staff members, bus drivers, playground aids, and cafeteria staff.
- Ensure access to a professional school nurse for assessment, treatment, and monitoring.
- Classroom and testing accommodations based on individual student’s needs, as assessed by the school nurse, if indicated such as seating area/type, rest period.
- Transportation recommendations (NASN, 2023b).

The Epilepsy Foundation has 504 sample accommodations. 504 plans must be individualized to the student’s needs. https://epilepsynorcal.org/wp-content/uploads/2015/07/Sample_504.pdf

References:

- Americans with Disabilities Amendment Act (ADAA), 42 U.S.C. 12102 (2008). <https://www.eeoc.gov/statutes/ada-amendments-act-2008>
- Epilepsy Foundation (n.d.). Model 504 Plan for a Student with Epilepsy. https://epilepsynorcal.org/wp-content/uploads/2015/07/Sample_504.pdf
- National Association of School Nurses. (2023a). *IDEIA and Section 504 Teams* - The school nurse as an essential team member (Position Statement). Author. <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ideia>
- National Association of School Nurses. (2023b). *School nursing evidence-based clinical practice guideline: Students with seizures and epilepsy*.
- Rehabilitation Act of 1973, 29 U.S.C. § 701 (1973). <https://www.eeoc.gov/rehabilitation-act-1973-original-text>
- U.S. Department of Education. (2020). Free appropriate public education. <https://www2.ed.gov/about/offices/list/ocr/frontpage/pro-students/issues/dis-issue03.html>

INDIVIDUALIZED HEALTHCARE PLAN (IHP)

SEIZURES/EPILEPSY

STUDENT NAME:		DOB:		
Student Address: Home Phone: Parent/Guardian: Day/Work Phone: Healthcare Provider: Provider Phone: IHP Written By:		School: Teacher/Counselor: Grade: IHP Date: IEP Date: Review Date(s): ICD-9 Codes:		
Parental/Guardian statement: <i>I/We have read this plan and agree to its implementation.</i>				
Signature(s): _____ Date: _____				
Assessment Data	Nursing Diagnosis	Goals	Nursing Interventions	Expected Outcome
Sample student has been diagnosed with Tonic-clonic seizures.	Risk for ineffective airway clearance among students with seizures and epilepsy, as evidenced by accumulation of secretions during seizure.	Student will receive evidence-based first aid and seizure management by trained individuals.	<ul style="list-style-type: none"> ■ Obtain and follow students Seizure Action Plan or Emergency Care Plan. Position the student on their side after seizure activity. ■ Monitor the student's airway. ■ Assess for any signs of aspiration such as dyspnea, cough, cyanosis, wheezing, hoarseness. 	Student will maintain patent airway and clear lungs sounds.
Sample student often experiences an aura prior to onset of tonic-clonic seizure.	Risk for Injury from fall or during seizure event.	If the student has the presence of an aura (focal aware seizure), student will demonstrate safety measures prior to the onset of the next seizure. Provide safety and manage privacy/dignity (as much as possible.)	<ul style="list-style-type: none"> ■ Provide seizure first aid training to school personnel to reduce the risk of injuries. ■ Administer emergency medications as directed. ■ Monitor vital signs. 	Remain free from injury while experiencing a seizure in the school setting. Increased self-advocacy and self-management of seizures and epilepsy.

INDIVIDUALIZED HEALTHCARE PLAN (IHP)

STUDENT NAME:			DOB:	
Parental/Guardian statement: <i>I/We have read this plan and agree to its implementation.</i> Signature(s): _____ Date: _____				
Assessment Data	Nursing Diagnosis	Goals	Nursing Interventions	Expected Outcome
Parents report that their child has no friends because of his seizures.	Risk for social isolation among students with seizures and epilepsy, as evidenced by unpredictability of seizures, community-imposed stigma.	Student will be able to practice social / communication skills needed to interact with their peers. Student will be able to participate in school activities and programs. Student will be able to describe feelings of self-confidence.	<ul style="list-style-type: none"> School nurse and counselor to establish trusting/therapeutic relationship with students. Provide support to students and their family to improve behavioral and mental health needs which may positively impact school performance. Observe barriers to social interaction. Promote social interactions. Support expression of feelings. Encourage students to identify what is most important from their viewpoint and lifestyle. 	Maintain and increase participation in school activities in the classroom and beyond. Maintain and increase self-esteem.

National Association of School Nurses (2023). Resources for supporting students with epilepsy in the school setting. *Supporting Students in the School Setting: A Transition Toolkit for School Nurses*. <https://learn.nasn.org/courses/54876>

INDIVIDUALIZED HEALTHCARE PLAN (IHP) SEIZURES/EPILEPSY

Page: ____ of ____

STUDENT NAME:		DOB:		
Student Address: Home Phone: Parent/Guardian: Day/Work Phone: Healthcare Provider: Provider Phone: IHP Written By:		School: Teacher/Counselor: Grade: IHP Date: IEP Date: Review Date(s): ICD-9 Codes:		
Parental/Guardian statement: <i>I/We have read this plan and agree to its implementation.</i> Signature: _____ Date: _____				
Assessment Data	Nursing Diagnosis	Goals	Nursing Interventions	Expected Outcome
	Risk for injury from falling during seizure activity	The student will (if developmentally able) demonstrate safety measures, when aura presents prior to seizure, in order to prevent injury.	Reduce or remove factors that may cause or contribute to injury during a seizure. Provide student-specific information to selected school personnel for student: <ul style="list-style-type: none"> - Type of seizure, treatment regimen, including medication side effects - Precautions, safety issues - First aid care for immediate and recovery care - Emergency plan of care and follow-up - Evacuation plan 	The student will not sustain injury during seizure while at school. The student will (if developmentally able) describe symptoms that accompany an aura. The student will wear a medical alert bracelet.

STUDENT NAME:			DOB:	
Parental/Guardian statement: <i>I/We have read this plan and agree to its implementation.</i> Signature: _____ Date: _____				
Assessment Data	Nursing Diagnosis	Goals	Nursing Interventions	Expected Outcome
	Risk for fatigue related to: - Type of seizure activity - frequency of seizure activity - Severity of seizure activity	The student will (as developmentally appropriate) assist in the decision-making process regarding health management issues at school.	Provide student-specific information to selected school personnel for student: - Type of seizure, treatment regimen, including medication side effects - Precautions, safety issues - First aid care for immediate and recovery care - Vegas nerve stimulator magnet application - Seizure log documentation - Emergency plan of care and follow-up - Evacuation plan	The student will ask the teacher for clarification of instructions or directions that were missed on account of seizure activity (if student is aware that a seizure has occurred). The student will follow schedule that allows for regular meals, sleep, and rest times. The student will wear a medical alert bracelet. The student will develop positive coping mechanisms.

SEIZURES AND EPILEPSY – DELEGATION OF CARE AND MEDICATIONS

The National Association of School Nurses (NASN) position is that all students should have access to school nursing care by a registered, professional school nurse all day, every day (NASN, 2022). The 2021 NASN's School Nurse Workforce Study revealed that only 65.7% of schools in the United States had a full time school nurse (Willgerodt et al, 2023). Delegation of nursing tasks [for students with seizures/epilepsy] by a school nurse to competent unlicensed assistive personnel (UAP) must involve training, evaluation of competence and ongoing supervision (NASN, 2018). In the school setting, a UAP includes but is not limited to teachers, coaches, bus drivers, cafeteria staff, paraprofessional aides, and administrative building personnel. School nurses may delegate seizure/epilepsy care tasks that do not require nursing judgment to a UAP, in accordance with the principles of nursing delegation and state nurse practice acts. The school nurse facilitates the UAP training and provides ongoing supervision (NASN, 2020a; National Council of State Boards of Nursing [NCSBN] & American Nurses Association [ANA], 2019).

School Nursing Evidence-based Clinical Practice Guideline: Medication Administration in Schools Implementation Toolkit
<https://learn.nasn.org/courses/36927>

C5 Seizure Management and Emergency Use Medications with links to emergency medication administration videos is an available resource for training in this seizure/epilepsy toolkit.

References

- National Association of School Nurses. (2020a). *The school health services team: Supporting student outcomes* (Position Statement). Silver Spring, MD: Author. <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-team>
- National Association of School Nurses. (2022). *Student access to school nursing services* [Position Statement]. Author. <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-access-to-services>
- National Association of School Nurses. (2018). *Nursing delegation in the school setting*. <https://www.nasn.org/nasn-resources/resources-by-topic/delegation>
- National Council of State Boards of Nursing (NCSBN) & American Nurses Association (ANA). (2019). *National guidelines for nursing delegation*. https://ncsbn.org/public-files/NGND-PosPaper_06.pdf
- Shafer, P.O. & Dean, P.M. (2018). *Vagus nerve stimulation (VNS) therapy*. Epilepsy Foundation. <https://www.epilepsy.com/treatment/devices/vagus-nerve-stimulation-therapy>
- Willgerodt, MA, Brock, D., & Tanner, A. (2023). National School Nurse Workforce Study 2.0. Manuscript in preparation.

BASIC SEIZURE/EPILEPSY FIRST AID RECOMMENDATIONS

First Aid Procedures

- Track time (length of seizure)
- Keep student safe
- Help ease them to the floor
- Do not restrain
- Do not put anything in mouth *
- Protect head
- Keep airway open/watch breathing
- Turn student on side
- Reassure and stay with student until fully conscious
- Stay calm
- Record seizure in log

Student in Wheelchair First Aid

- Stay with student and time seizure
- Apply wheelchair brakes
- Leave student in wheelchair with seatbelt on
- Recline backrest / Do Not tilt chair
- Lean student to one side to allow for drainage from mouth
- Support head / protect airway
- After seizure has stopped, with care, remove from chair and place in recovery position—lying on side, if possible
- Reassure and stay with student until fully conscious

A Seizure Becomes an Emergency (ACTIVATE EMS) When:

- Student has a first-time seizure
- Convulsive (tonic-clonic) seizure lasts longer than 5 minutes or as directed by HCP.
- Student has repeated seizures without regaining consciousness
- Student is injured or has diabetes or is pregnant
- Student has breathing difficulties
- Student has a seizure in water
- For students with a known seizure disorder, it is the first episode requiring emergency treatment
- Any concerns with airway, breathing, circulation, or other vital signs

* Except for FDA approved devices and only according to the directions for use.

<https://www.fdanews.com/articles/211466-neurovice-pati-device-cleared-to-prevent-oral-injuries-during-seizure>

References

AAP.org (nd). First Aid for Seizures in a Wheelchair. Epilepsy Foundation. https://downloads.aap.org/DCMO/Wheel_Chair_First_Aid.pdf

Centers for Disease Control and Prevention (2022). *Seizure first aid*. <https://www.cdc.gov/epilepsy/about/first-aid.htm>

Epilepsy Alliance America Releases Seizure First Aid Poster (2021) <https://www.epilepsyallianceamerica.org/epilepsy-alliance-of-america-releases-seizure-first-aid-in-the-age-of-covid-19-poster-for-use-in-public-schools/>

Epilepsy Foundation (2022). *Seizure first aid*. <https://www.cdc.gov/epilepsy/about/first-aid.htm>

Seizure First Aid posters in 17 languages can be found at:

Epilepsy Foundation (2020). <https://www.epilepsy.com/tools-resources/forms-resources/first-aid>

SPECIALIZED DIETS FOR SEIZURES/EPILEPSY AND POSSIBLE 504 ACCOMMODATIONS

Antiseizure medications control seizures in many children/youths, however 30% of children with epilepsy become drug therapy resistant (Kumar, 2021). For children/youth whose epilepsy is drug therapy resistant, a ketogenic diet may be considered. The term Ketogenic Diet refers to any diet therapy which results in a ketogenic state of metabolism. Currently, there are 4 major Ketogenic diet therapies (Wells et al., 2020). The ketogenic diet has been used to treat drug therapy resistant epilepsy since the 1920's and contains high levels of fat and low levels of carbohydrates (Sourbron et al., 2020). The ketogenic diet has strict ratios of carbohydrate to fat. Additional carbohydrates are not permitted in order to maintain compliance (Kossoff, E., 2017). For additional information on ketogenic diets and other diet therapies: <https://www.epilepsy.com/treatment/dietary-therapies/ketogenic-diet>

Possible 504 accommodations:

The parent/guardian of student's name shall provide pre-measured supplies of food and liquid (to maintain ketogenic diet) to the school daily.

Staff who educate and work with students' name shall receive training, so a ketogenic diet is not disrupted at school.

Classmates shall be given information that some of their classmates can only eat certain food and not share food.

Nonfood celebrations will be encouraged. Teachers should work with the parent/guardian so the student may partake in the celebration safely. Nonfood alternatives to consider, donate a book or game to the class in honor of your child or stickers or pencils or perhaps celebrate by choosing or dancing to a favorite song in the classroom or for a birthday decorate a box and send in a pack of index cards so the class can each write something they like about the child who is being celebrated.

https://epilepsynorcal.org/wp-content/uploads/2015/07/Sample_504.pdf

Resources:

USDA Food and Nutrition Service – Meal Substitutions for Medical or Other Dietary Reasons. <https://www.fns.usda.gov/cn/meal-substitutions-medical-or-other-special-dietary-reasons>

Medical Statement for Students with Unique Mealtime Needs for School Meals - [www.dpi.nc.gov > documents > schoolnutrition](http://www.dpi.nc.gov/documents/schoolnutrition) Medical Statement for Students with Special Nutritional Needs

References:

Epilepsy Foundation (2023). Ketogenic Diet. <https://www.epilepsy.com/treatment/dietary-therapies/ketogenic-diet>

Epilepsy Foundation (n.d.). Model 504 Plan for a Student with Epilepsy. https://epilepsynorcal.org/wp-content/uploads/2015/07/Sample_504.pdf

- Kossoff, E., (2017). *Ketogenic diet*. Epilepsy Foundation. <https://www.epilepsy.com/treatment/dietary-therapies/ketogenic-diet>
- Kumar, G. (2021). Evaluation and management of drug resistant epilepsy in children. *Current Problems in Pediatric and Adolescent Health Care*, 51(7), 101035.
- Sourbron, J., Klinkenberg, S., van Kuijk, S. M., Lagae, L., Lambrechts, D., Braakman, H. M., & Majoie, M. (2020). Ketogenic diet for the treatment of pediatric epilepsy: review and meta-analysis. *Child's Nervous System*, 36, 1099-1109.
- Wells, J., Swaminathan, A., Paseka, J., & Hanson, C. (2020). Efficacy and safety of a ketogenic diet in children and adolescents with refractory epilepsy—A review. *Nutrients*, 12(6), 1809.

SEIZURE ACTION PLAN (SAP)

NASN's School Nursing Evidence-Based *Clinical Practice Guidelines: Students with Seizures and Epilepsy*™ points out that the complex and unique healthcare needs of school children with epilepsy are not consistently met in the school setting due to issues related to discordant school nursing care, knowledge deficits related to seizure management among school personnel, and medication delegation barriers (Hartman et al., 2016; NASN, 2023).

A Seizure Action Plan (SAP) is a seizure-specific treatment plan signed by the healthcare provider. The SAP includes parameters for emergency care in the event of a prolonged seizure, prescribed rescue medications and instructions for use, as well as emergency contact information (NASN 2023). The student's SAP and access to prescribed emergency medications is key to evidence-based practice, high quality care for students with epilepsy in the school setting (NASN, 2023; Dean et al., 2021).

NOTE: Delegation of rescue medications is addressed separately..

Seizure Action Plan examples

Epilepsy Foundation (2023). Seizure Action Plans (Fillable)

<https://www.epilepsy.com/sites/default/files/2023-08/SeizureActionPlan2023ACCE.pdf>

*Available in English, Spanish, Chinese, Korean, Ukrainian, Vietnamese, and Tagalog.

Child Neurology Foundation (2023). Seizure Action Plan (Fillable)

https://www.childneurologyfoundation.org/wp-content/uploads/2018/04/CNF_Seizure_Action_Plan_v3.pdf

Missouri Department of Health & Senior Services (n.d.) SN CHAT- School Nurse Chronic Health Assessment Tool – Seizure Emergency Action Plan (Fillable)

<https://health.mo.gov/living/families/schoolhealth/pdf/seizures-eap.pdf>

References:

Dean, P., O'Hara, K., Brooks, L., Shinnar, R., Bougher, G., & Santilli, N. (2021). Managing Acute Seizures: New Rescue Delivery Option and Resources to Assist School Nurses. *NASN School Nurse*, 36(6), 346-354. <https://doi.org/10.1177/1942602X211026333>

Hartman, A. L., Devore, C. D. L., Doerr, S. C., Section on Neurology, American Academy of Pediatrics, Council on School Health, American Academy of Pediatrics, and the Section on Neurology, & Council on School Health. (2016). Rescue medicine for epilepsy in education settings. *Pediatrics*, 137(1), e20153876. doi:10.1542/peds.2015-3876

National Association of School Nurses. (2023). *School nursing evidence-based clinical practice guideline: Students with seizures and epilepsy*. <https://learn.nasn.org/courses/8992>

EMERGENCY ACTION OR CARE PLAN TEMPLATE

Student's Name: _____ Date of Birth: _____

Medical Diagnosis: _____

Allergies: _____ Grade: _____ School Year: _____

Grade/Teacher: _____ Date of Plan: _____

Emergency Contact Information

Parent/Guardian 1: _____ Email Address: _____

Home Phone: _____ Work Phone: _____ Mobile: _____

Parent/Guardian 2: _____ Email Address: _____

Home Phone: _____ Work Phone: _____ Mobile: _____

Healthcare Provider: _____ Phone: _____

School Nurse: _____ Phone: _____

If the student exhibits any of the following:

***** NOTE: Never leave the student alone or send anywhere alone or with another student**

Take the following emergency actions for all seizures:

- Notify the school nurse
- Call 911 if student is seizure last more than 5 minutes or if student has repeat seizures lasting more than 10 minutes with no recovery between the seizures. Call 911 if the seizure happens in water or if the student is pregnant or sustained an injury during the seizure
- Call parents/guardians

Additionally you should also consider taking the following steps:

Reviewed with: _____ Date: _____

Signature of school personnel: _____

Signature of school nurse: _____

SAMPLE CHECKLIST FOR STAFF TRAINING

NOTE: Check your state and local laws, your state nurse practice act and school policy regarding delegation to Unlicensed Assistive Personnel. You can modify the following checklist.

- ☐ **Define seizure and epilepsy**
- ☐ **Prevention of Seizure events**
 - Importance of medication compliance
 - Avoiding triggers if possible
 - Skills to reduce stress
- ☐ **Recognizing seizure activity**
 - Review seizure types
- ☐ **Managing Seizure events**
 - Review how to follow students Emergency Action or Care Plan (EAC/ECP) or Seizure Action Plan (SAP)
 - General safety protocols to protect student from harm
 - Considerations for classmates
 - If allowed by your state and local laws and complies with your state nurse practice act delegate and train Unlicensed Assistive Personnel (UAP) to administer rescue seizure medication or use of Vagal Nerve Stimulator (VNS) based on competency.
 - Document according to local and district policy and procedure for seizure events
- ☐ **Frequency of training offered**
 - At least annually but consider more often if a student is more prone to seizures
 - Age-appropriate student education about seizures/epilepsy
 - Anti-bullying policy
 - VNS magnet Self-carry protocol
 - If developmentally appropriate
 - Able to treat self with VNS magnet
 - Document self-carry assessment
- ☐ **Delegation to Unlicensed Assistive Personnel-UAP** (once the UAP has completed medication administration training they may administer emergency/rescue medications if:
 - Nurse unavailable at school
 - If the student is on a field trip or is participating in an extra-curricular activity or on the bus.
 - Documentation of seizure events and treatment

Resources

NASN Online course on medication administration including delegation: [School Nursing Evidence-based Clinical Practice Guideline: Medication Administration in Schools Implementation Toolkit](#)

Your School
name and
Logo here



Seizures and Epilepsy Training Basics for School Personnel

Learning Outcomes

As a result of this training, the staff will be able to:



Define epilepsy.



Identify possible treatments for seizures and epilepsy.



Recognize possible signs and symptoms of a seizure.



Understand possible complex healthcare needs, both physical and mental.



Cite the steps of first aid for a seizure.

What Do Your State Laws Say?

According to the Epilepsy Foundation 23 states have enacted Seizure Safe Schools legislation. These laws vary from state to state but may mandate:



School nurse training



Delegation of rescue medication to educational staff after training



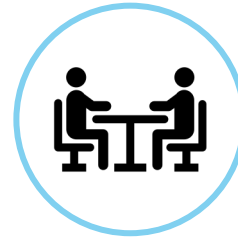
Seizure recognition and first aid training for educational staff



Student training



Students with epilepsy to have either: a Seizure Action Plan or administration of Food and Drug Administration (FDA)-approved treatments



Training that may include information about your state's Good Samaritan Clause

(Epilepsy Foundation, 2022)

Seizure and Epilepsy Defined

Seizures

Seizures occur when there is a sudden change in electrical activity in the brain.

There are many different types of seizures.

Each type of seizure affects people differently.

A seizure may make a person stare, collapse, shake or become unaware of what's going on around them.

Epilepsy

Epilepsy is a health condition that causes people to have repeated unprovoked seizures.

(AAP, 2023)

A person with epilepsy may have more than one type of seizures.

What Causes Epilepsy in Children?



Brain injuries,
strokes



Sometimes the
reason is unknown

Genetic
disorders



Brain tumors that
change the
structure or
function of
the brain



(AAP, 2023)

Prevalence of Epilepsy in School Aged Children

Approximately 470,000 children ages 6-17 years old in the United States have epilepsy, with a prevalence rate of 6.3/1,000

(Zack & Kobau, 2017; CDC, 2023)

About 1 in 10 people will have a seizure at one point in their lives
(CDC, 2023)

1 in 26 will develop epilepsy over the span of their lifetime
(Epilepsy Foundation, 2023)



Seizure Diagnosis

- Epilepsy is one of the most common neurologic disorders seen in children.
- Seizure activity can mimic other health conditions which can make recognition and diagnosis challenging.
- Seizure diagnosis is often confirmed through electronic brain wave studies and MRI.

(Fine & Wirrell, 2020)



Seizure Clusters

- Acute repetitive seizure activity or seizures that occur in close succession
- May progress to status epilepticus

(Mesraoua et al. 2021)



Status Epilepticus

- A seizure lasts more than 5 minutes
- Recurrent seizure activity without recovery between seizures

(Wylie et al., 2023; Freedman & Wirrell., 2023)

Attention!



Types of Seizures

Generalized Seizures Affect Both Sides of the Brain

- **Absence** – (petit mal seizures), cause rapid blinking or staring into space. Typically last a few seconds.
- **Atonic Seizures** – (drop seizures) complete loss of muscle tone, person falls limp.
- **Tonic Seizures** - muscles stiffen and person falls. Typically last about 20 seconds.
- **Myoclonic Seizures** - characterized by short jerking of body parts. Typically last seconds.
- **Focal Onset**- affects only part of the brain, may display various symptoms and severity.

Focal Seizures



Focal Aware Seizures

Focal seizures affect one side of the brain and typically last seconds to minutes



Focal Impaired Awareness Seizures

Focal impaired seizures typically last seconds to minutes



Combined General and Focal Seizures

Both generalized and focal seizure types

(Epilepsy Foundation, 2023)

What is an Aura?

An “aura” describes how some people feel before they have a tonic-clonic seizure. An epilepsy 'aura' has been described as a focal aware seizure. The focal aware seizure is sometimes a warning that another seizure will occur.



Some people may describe their auras as:

- Feeling of déjà vu
- Unusual taste or smell



- Feeling of intense fear or happiness
- Strange feeling going through their head



- Twitching or stiffness of a body part such as a hand
- Numbness or tingling;



- Distorted sensation of a body part being larger on one side or the other;
- Colored or flashing lights or Hallucinations

Know Your Student's Seizure Triggers

Possible Triggers:

Missed daily seizure medications



Hormonal changes; menstruation

Lack of sleep or disrupted sleep



Missing a meal or lack of hydration

Illness or Stress

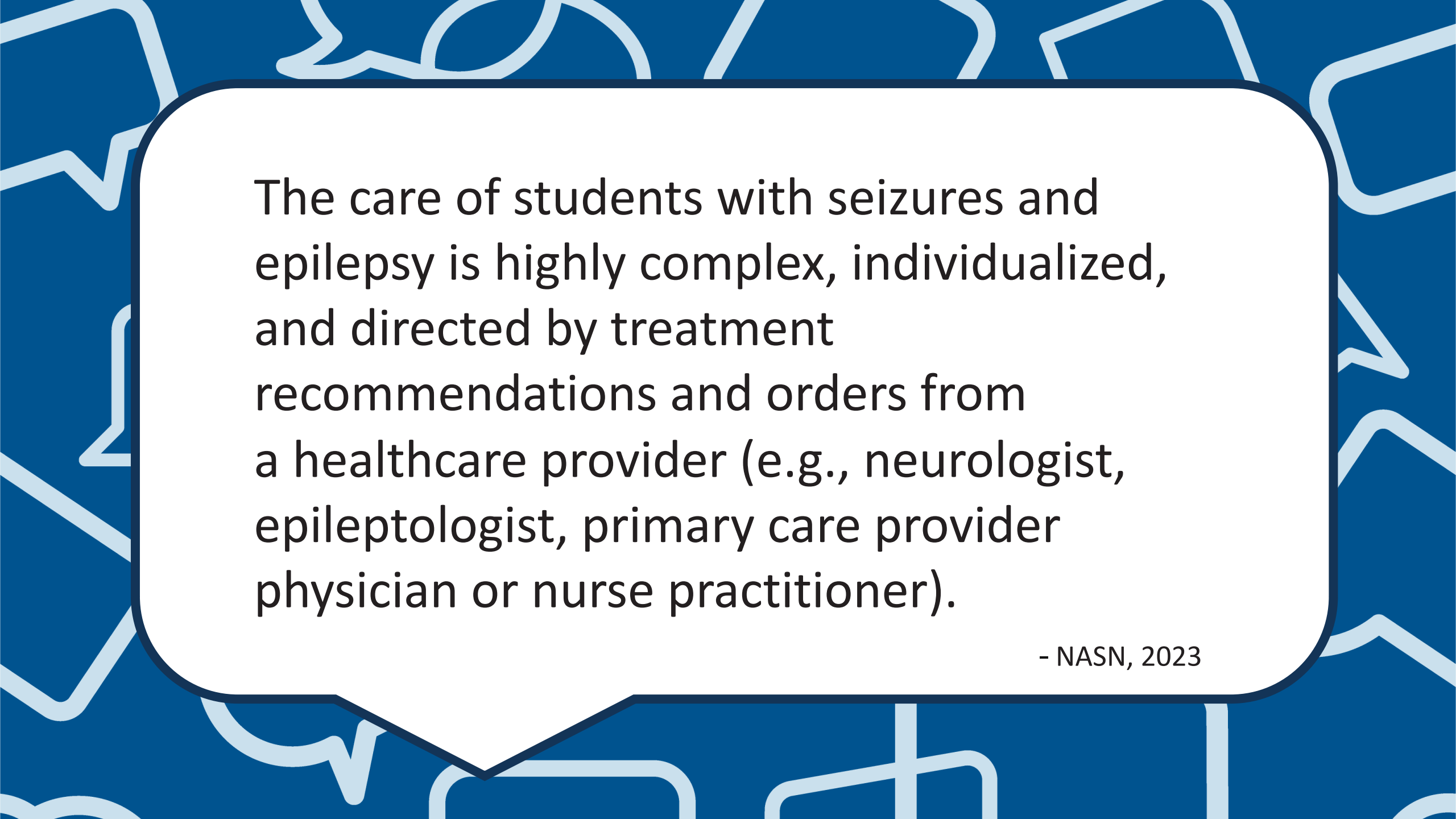


A specific food or caffeine

Flashing or strobing lights



Alcohol or drug use



The care of students with seizures and epilepsy is highly complex, individualized, and directed by treatment recommendations and orders from a healthcare provider (e.g., neurologist, epileptologist, primary care provider physician or nurse practitioner).

- NASN, 2023

Seizure Action Plans

School nurses develop plans to keep students safe at school.

Seizure Action Plans (fillable) can be found at:

<https://www.epilepsy.com/tools-resources/forms-resources/seizure-forms>

Available in English, Spanish, Chinese, Korean, Ukrainian, Vietnamese, and Tagalog.

(Epilepsy Foundation, 2023)

NASN has developed RESOURCES FOR SUPPORTING STUDENTS WITH EPILEPSY IN THE SCHOOL SETTING.

Sample forms include IHP, intake form, emergency action plan, and emergency intake form for students with seizures in the Epilepsy Transition Toolkit found in the NASN learning center at <https://learn.nasn.org/courses/54876/sections/62945>

Pharmacological Treatment for Epilepsy

(Epilepsy Foundation, Summary of Anti-Seizure Medications, 2023).

- Daily medication treatment of epilepsy includes anti-epilepsy drugs such as:
 - Carbamazepine
 - Phenytoin
 - Valproic acid
 - Lamotrigine
 - Topiramate
 - Levetiracetam
- One medication is the preferred choice, as each of the AEDs has the potential for significant side effects that impact the quality of life for the person with epilepsy.
- While almost half of all children with epilepsy can be successfully weaned off medication, approximately one-quarter will experience drug resistant epilepsy.

(Fine & Wirrell, 2020).

Common Epilepsy Medication Side Effects that May Impact Academics

- Feelings of tiredness
- Stomach upset
- Dizziness or blurred vision, which usually happen in the first few weeks of taking seizure medicines

(Mutanana et al, 2020)

Alternatives for Children with Hard to Manage Seizures

Vagus Nerve Stimulator (VNS)

One surgical option for hard to manage seizures is a VNS which is a small device or generator implanted under the skin in the left chest area.

The goal of the VNS is to prevent or lessen seizures by sending regular, mild pulses of electrical energy to the brain via the vagus nerve.

Magnet mode allows the delivery of stimulation therapy.

May be worn on the student's wrist.

The student's healthcare provider will provide specific instructions.

Responsive Neurostimulation (RNS)

- A Responsive Neurostimulation (RNS) device is surgically placed in the cranium with wires that lead to the part(s) of the brain where seizures occur to stimulate the brain when seizure activity is detected.
- RNS is FDA approved for adults 18 years and older, however RNS is being used in some children/youth as young as 8 years old.
- RNS also uses a magnet to record seizure activity.

(Epilepsy Foundation, 2017 and Hartnett et al., 2022)

Supporting a Specialized Diet

Occasionally a child/youth will be prescribed a special diet, usually combined with medication, can help control seizures.

- 4 major diets being researched.
- Primarily used for epilepsy that is medication resistant.

<https://www.epilepsy.com/treatment/dietary-therapies#What-is-Dietary-Therapy?>

US Department of Agriculture Food and Nutrition Service (USDA) guidance for schools to support the students needs.

https://fns-prod.azureedge.us/sites/default/files/special_dietary_needs.pdf

Supporting a Specialized Diet

Classroom teachers can provide support by:

- Avoid celebrating and rewarding children/youth with food.
- Discourage the sharing of food and drink.
- Encourage / allow the child/youth access to non-carbohydrate fluids.



Students with Complex Healthcare Needs

Complex healthcare needs refers to the presence of more than one disease process or medical condition at the same time.

Children/youth with epilepsy may have complex healthcare needs such as intellectual disability (occurring in 25% of students), learning disability and ADHD.

These needs must be addressed as part of their overall care.

Language Considerations

- *“School districts should ensure that interpreters and translators have knowledge in both languages of any specialized terms or concepts to be used in the communication at issue and are trained on the role of an interpreter and translator, the ethics of interpreting and translating, and the need to maintain confidentiality.”*

It is not sufficient for the staff merely to be bilingual.

(US DOJ & US DOE, n.d.)



Emergency Medications to Control Seizures

Rectal gel-

- Diazepam

Nasal spray -

- Diazepam
- Midazolam

Side of mouth, between teeth and lower cheek-

- Midazolam
- Lorazepam

Emergency Medications - Demonstration videos

<https://scepilepsy.org/educational-videos>

- Diazepam Gel-rectal Administration
- Diazepam Intranasal spray
- Midazolam Intranasal spray
- VNS (Vagus Nerve Stimulation)
- Lorazepam Seizure Medication Training

Videos are available in English and Spanish

Seizure First Aid

Follow the student's seizure action plan (SAP).

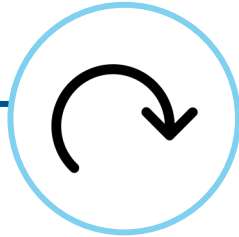
For a first-time seizure or if you give a rescue medication, you need to **CALL 911!**



Stay calm and note the time the seizure started.

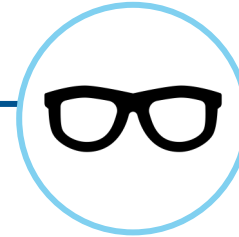
Keep student safe.

Do not restrain the student.



Do not put anything in their mouth.

Stay with the student until fully conscious.



Record the seizure in the student's log.

Check the student for injuries acquired during the seizure.



Call 911 IF


First-time seizure

Lasts longer than 5 minutes or as directed in healthcare provider orders

Repeated or clusters of seizures

Difficulty breathing

After administering rescue medication.



Call 911 If:

- First seizure
- Difficulty breathing or gaining consciousness
- Seizure lasts longer than 5 minutes
- Has another seizure soon after the first one
- Injured during the seizure
- The seizure happens in water
- The person has a health condition like diabetes, heart disease, or is pregnant

Mental Health and Epilepsy

It is understandable that parent(s)/guardians as well as the student may feel anxious due to concerns around their epilepsy.

For the student:

- Fear of a seizure at school or on the bus

For the parent/guardian:

- Fear that their child/youth will be socially excluded, teased/bullied

Talking to students about seizures/epilepsy can help prevent bullying

Mental Health and Epilepsy: School Response

What can schools do?

- Create and maintain a safe, supportive, equitable school environment for all students.
- Promote efforts to support all students by building a positive school climate
- Reinforce the school's rules against bullying and discrimination.
- Address all reports of bullying or harassment of a student with epilepsy to school administrators
- Inform parents if their child has been bullied.

Social Needs

Epilepsy can negatively affect physical, psychological and social functioning of children and their families.

- Rosensxtrauch & Koltuniuk (2022)



Affect examples:

- Societal stigma
- Co-morbid conditions
- Stress from lack of sleep, anxiety
- Fear of Sudden Unexpected Death in Epilepsy (SUDEP)

(Maya Kaye, 2021)



Frequent seizures and medication side effects may impact the student's self-image.

Ability to develop friendships with their peers.

(Rozensztrauch & Kołtuniuk, 2022)

Epilepsy Foundation Seizure Education for School Staff

Seizure Training for School Personnel

<https://learn.epilepsy.com/courses/school-personnel-OD-v2a>

- More resources and education for school preparedness

<https://www.epilepsy.com/preparedness-safety/schools>

- Take Charge of the Storm Jr.: a school-based epilepsy awareness program for children in kindergarten through 5th grade.

Contact your [local Epilepsy Foundation](#) for more details on education and training.

Epilepsy Foundation Education for Classroom Students

Seizures and You. Take Charge of the Storm Jr.

(K-5) <https://youtu.be/MBfJozL7qHM>

Epilepsy Foundation Kids Crew Show (educational resources for use in the classroom)

<https://www.epilepsy.com/volunteer/kids-crew>



Epilepsy Foundation – An Overview of Epilepsy and Seizure First Aid



Seizure First Aid videos

https://youtu.be/z6K8XQQf9ss?list=PLpIN29lx9vI40Og6W8PVUEE_mp9KgsroD

<https://learn.epilepsy.com/pages/educational-videos>

Epilepsy and sports

It is up to the child/youth's healthcare provider to clarify any physical education or recess restrictions (including any playground equipment restrictions).

For most students, the benefits of exercise outweigh the risks (physically, emotionally and mentally).

<https://www.epilepsy.com/lifestyle/summer-camp/water-safety>





Transition Planning

Transition planning for after high school graduation needs to start **early**.

Transition planning is strongly recommended to begin at age 15 to allow for enough time to prepare for the challenges of taking over their own care at the time they become of legal age.



Transition Planning

What about for other significant changes to the students education?

When progressing to a new teacher, the next grade or new school, the school nurse or designee (as assigned by school administrator) communicates "need to know" healthcare needs. This is a form of care coordination.

Transition Planning

Always include the school nurse in transition meetings for students with epilepsy.

NASN has 2 new online learning opportunities:

- Transition for Students with Epilepsy: The Role of the School Nurse Panel Presentation <https://learn.nasn.org/courses/55489>
- Supporting Students with Epilepsy: A Transition Toolkit for School Nurses

<https://learn.nasn.org/courses/54876>

- FERPA allows the sharing of a child/youth record with school officials with a legitimate educational interest.

<https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

Additional resource for teachers

Epilepsy Foundation - Seizure Training for School Personnel (On Demand)

- 60-75 minutes
- Certificate of Completion

<https://learn.epilepsy.com/courses/school-personnel-OD-v2a>

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Any
Questions?



Thank You!

Your school/District info or logo

Or

Your info
Goes here



SEIZURE/EPILEPSY MANAGEMENT AND EMERGENCY MEDICATIONS

These common medications are not a cure but are used to control seizures/epilepsy (Sirven et al., 2013 & Epilepsy Foundation, 2023). The IHP developed by the school nurse should address the awareness of the impact of adverse side-effects of anti-epileptic drugs for maintenance of the condition as follows:

- **Lamotrigine** common side effects e.g., nausea, runny nose, insomnia, headache, diarrhea, dizziness, fatigue
- **Levetiracetam** common side effects e.g., dizziness, headache, irritability, loss of strength/energy, mood or behavior changes, insomnia
- **Topiramate** common side effects e.g., tired/drowsy, difficulty concentrating, difficult word retrieval, confusion, dizzy/unsteady, sensation of pins and needles in fingertips and toes, loss of appetite, nervousness, depression, memory difficulty
- **Valproic acid** common side effects e.g., tired, dizzy, nausea/vomiting, tremor, hair loss, weight gain, irritability
- **Phenytoin** common side effects e.g., Fatigue, dizziness, nausea/vomiting/diarrhea, irritability, nervousness, restlessness, headache, rash, ventricular fibrillation
- **Carbamazepine** common side effects e.g., sleepy, dizzy, unsteady walking and nausea

<https://www.epilepsy.com/>

Emergency use medications – medication administration training videos:

Diazepam rectal gel - <https://www.youtube.com/watch?v=AYPzm4xdOqQ>

Diazepam rectal gel - Child Administration Instructions - https://portal.ct.gov/-/media/SDE/School-Nursing/Publications/diastat_child_administration.pdf

Diazepam nasal spray - <https://www.valtoco.com/how-to-use>

Midazolam - <https://www.nayzilam.com/how-to-use-nayzilam>

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SEIZURE/EPILEPSY OBSERVATION AND DOCUMENTATION

Seizures can be broken down into phases.

- **Prodrome phase:** behaviors or feelings that are experienced hours or days before a seizure occurs. Some common signs include changes in mood, insomnia, difficulty with focus, or behavioral changes.
- **Aura:** Some people experience an aura, some do not. An aura is considered a warning sign and may precede a more serious seizure. Some symptoms may include a feeling of *Deja`vu*, odd sounds or tastes or smells, dizziness, headache, nausea, or panic.
- **Ictus or Ictal phase** is the seizure event, a time of unusual electrical brain activity. Common signs include loss of awareness, lapse of memory, hearing and speaking difficulties, loss of muscle control, repeated movements (e.g., twitching or jerking, lip smacking, chewing), difficulty breathing.
- **Postictal phase:** is the recovery period after the seizure. Depending on what part of the brain was affected will dictate how long the recovery will take. Common in the postictal stage include fatigue, confusion, headache, frustration, loss of bladder or bowel control, sore muscles, embarrassment, and weakness.

Some people remember having a seizure, some remember something, some not at all. It is also possible for the person to go right into another seizure.

Timing a seizure and documentation of details

A seizure documentation tool is an important part of your seizure management plan. Noting the time the seizure started and ended is information the physician will utilize to make decisions about the students therapies. A sample **Seizure Documentation Log** has been included in this toolkit. The Epilepsy Foundation has a page with Tips for Observation. It can be found at: <https://www.epilepsy.com/manage/tracking/observation>

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SEIZURE/EPILEPSY DOCUMENTATION LOG

Student name: _____ DOB: _____

Date of Seizure				
Time of Onset				
Observation Prior to Seizure	Behavior, triggering activity, aura			
Extremity Involvement:	Both upper and lower			
Arms Affected:	Right			
	Left			
Legs Affected:	Right			
	Left			
	Straight			
	Bent			
	Stiff			
	Limp			
Verbal Sounds:	Before			
	During			
Face Twitching				
Mouth:	Open			
	Closed			
	Grimacing			
	Drooling			
	Lip smacking			
	Chewing			
Eye Movement:	Rolled back			
	Turned R or L			
	Fluttering			
	Closed			
	Staring			
Head:	Hyperextended			
	Nodding			

Date of Seizure (cont.)				
Body/Trunk:	Rigid			
	Limp			
	Sitting			
	Laying			
	Trembling			
	Jerking			
	Standing			
Skin Color:	Pale			
	Blue			
	Gray			
	Red / flushed			
Breathing:	Normal			
	Labored			
	Noisy			
	Stopped (how long)			
Incontinent: Bowel / bladder				
Time Seizure Activity Ended				
Observation after seizure:	Drowsy			
	Confused			
	Postictal (how long)			
Injury				
Rest then returned to Class				
Parent notified				
911 Called				
Sent Home				
Responder Initials				

Signature:

_____	_____
_____	_____
_____	_____
_____	_____

Adapted from Wisconsin Department of Public Instruction (n.d.). Seizure Monitoring Chart.

<https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdpi.wi.gov%2Fsites%2Fdefault%2Ffiles%2Fimce%2Fsspw%2Fdoc%2Fsnseizurechart.doc&wdOrigin=BROWSELINK>

SEIZURES AND EPILEPSY – FIELD TRIPS AND EXTRACURRICULAR ACTIVITIES CHECKLIST

Local educational agencies (LEA) are responsible for providing needed accommodations for students with a healthcare condition or disability so they may participate safely in school programs or activities (US Department of Education/Office of Civil Rights, 2022). School officials cannot require that a parent/guardian of a child with special healthcare needs attend if parents of students without special healthcare needs are not required to accompany their children (USDE/OCR, 2016).

This document includes a checklist of considerations for preparation before a field trip and emergency medication to treat seizures on field trips and extracurricular activities.

The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice. -NASN (2016)

Mitigation and Prevention of Seizure Emergency:

- ☐ Two to four weeks prior to field trip, connect with parent/guardian of students with known seizures/epilepsy and any other comorbid health conditions to discuss the needs of the student.
- ☐ Discuss with parent/guardian any updates to emergency contact information.
- ☐ Review student's Emergency Care/Emergency Action Plan (ECP/EAP) and revise as needed for field trip circumstances.
- ☐ Discuss with the school administrator and field trip supervisor the **necessary** staffing to meet student health needs. Abide by state laws, the state Nurse Practice Act, and the student's 504 Plan or IEP.
- ☐ Follow local and district policy for the transfer of stock medication to and from fieldtrip personnel who will be responsible for the safety and security and the administration of the medication as well as its return to the clinic at the end of the fieldtrip.
- ☐ If applicable, review with staff that the child/youth's specialized diet or dietary restrictions must be adhered to while on the field trip.
- ☐ After the field trip, initiate debrief to evaluate what worked well and suggestions for improvement on subsequent trips.

School Nurse Practice Considerations for Out-of-State Fieldtrips:

- ☐ Explore the Nurse Practice Act of the state(s) the students will visit or travel through. Can the nurse practice in those states?
- ☐ Determine if the state(s) where the field trip occurs allows for delegation of nursing health services to unlicensed assistive personnel (UAP).

- ❑ Determine whether the state(s) where the field trip occurs allows for medication administration to the student by anyone other than a licensed healthcare professional. In the event of allowable delegation, determine if remote supervision is allowed if school nurse is not attending field trip.
- ❑ If the state is not part of the Nurse Compact, determine what the state(s) where the field trip will occur requires an order for the licensed registered nurse to provide nursing care in that state.
- ❑ If the student self carries their VNS magnet, review competencies prior to field trip.
- ❑ For an “out of country” field trip investigate applicable laws as nursing licensures are not recognized out of the United States.
- ❑ Evaluate the need for extended liability of the school nurse for the performance of nursing acts while outside normal working or contract hours.

Staff Education and Training:

- ❑ Educate all field trip staff about seizures, including:
 - signs and symptoms
 - emergency management
 - who is responsible for administering the emergency medication and where the emergency medication will be located during the field trip
 - trained staff should remain with student if separated into small groups or on a different bus
 - document training
 - review emergency protocols with appropriate field trip staff

Emergency Preparedness:

- ❑ For all students, especially students with chronic diseases, obtain consents and insurance information from parents/guardians to obtain emergency medical services for their child while on a field trip (keep this information in a confidential file).
- ❑ Make sure cell phones are fully charged and other emergency communication devices are available and in working order.
- ❑ Evaluate the availability and response time of Emergency Medical Services (EMS) on the field trip route and destination.
- ❑ Plan emergency procedures for areas in which cell phone reception may not be available.
- ❑ Understand how to directly communicate with the student’s parent(s) in the event of an emergency and ensure all designated adults have emergency contact numbers.
- ❑ Identify where hospitals are located on the field trip route and destination.

Medication Storage:

- ❑ Determine where medication, including emergency medication will be stored, keeping in mind temperature stability, accessibility, and safety.
- ❑ Medications, especially emergency medication, or equipment, should NOT be left in a backpack on the bus or with school staff who is not with the student.
- ❑ Determine where the student’s Emergency Care Plan/Emergency Action Plan will be stored, ensuring accessibility during an emergency.
- ❑ Develop a plan on what to do if medication is lost or misplaced including: contacting parents/guardians and obtaining additional medication.

- ❑ Identify which students will be able to self-carry VNS magnet. Ensure that proper education, competency, and documentation has been completed.
- ❑ For “out of the country” field trips, obtain copies of all prescriptions for prescription medications.

Medication Administration:

- ❑ Ensure a system to document medication administration.
- ❑ Develop a plan on how to obtain additional medication if needed.

References:

- National Association of School Nurses. (2016). *NASN Code of Ethics*. <https://www.nasn.org/nasn-resources/resources-by-topic/codeofethics>
- NASN School Nursing Evidence-based Clinical Practice Guideline: Medication Administration in Schools Implementation Toolkit - <https://learn.nasn.org/courses/36927>
- Wisconsin Department of Public Instruction. (2019). Meeting student health needs while on field trips tool kit for Wisconsin schools. Retrieved May 22, 2020, from https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/Meeting_Student_Health_Needs_While_on_Field_Trips_Tool_Kit.pdf
- U.S. Department of Education, Office for Civil Rights. (2022). *Protecting students with disabilities*. <https://www2.ed.gov/about/offices/list/ocr/504faq.html#skipnav2>
- U. S. Department of Education, Office for Civil Rights. (2016). *Parent and educator resource guide to Section 504 in public elementary and secondary schools*. Retrieved from <https://www.ed.gov/news/press-releases/us-department-education-releases-guidance-civil-rights-students-disabilities>

STUDENTS WITH SEIZURES AND EPILEPSY – DATA COLLECTION TOOL

Seizure / Epilepsy HCP	# of Students	# SAP/ECP on File	# IHP	# 504	#IEP	# of students chronically absent
Absence						
Atonic and Tonic						
Generalized Tonic-clonic						
Myoclonic Seizures						
Focal Aware						
Focal Impaired						
Other						

Emergency Medication / Treatment		
# students w diazepam rectal gel		
# students w midazolam nasal spray		
# students w diazepam nasal spray		
# students w magnet for VNS		
# students w Self-carry - VNS magnet		
#SN spot check for VNS magnet self-carry	Student prepared	
	Student NOT prepared	
	# SN re-enforcement provided	
Seizure management		
# students with seizure event at school		
Total # seizure events at school		
# students with 1st time seizure at school		
# students requiring administration of seizure rescue medication		
Disposition following seizure event	EMS/911	
	Home	
	RTC	
Admin of Emergency Medication	RN	
	LPN/LVN	
	UAP	
	Office staff	
	Teacher	
	Other	

Staff training	
# trainings	
Training drills	
Debriefing of seizure event	
School Nurse Feedback/Evaluation of Seizure Management Care	
Student/caregiver satisfaction with care coordination efforts of the school	
SN evaluation of effectiveness of staff training	
SN eval of effectiveness of staff response to seizure emergency management	
Policy changes noted	
Practice changes noted	
General notes	

SAMPLE SEIZURES/EPILEPSY PROGRAM QUALITY IMPROVEMENT CHECKLIST

- ☐ Continuous systematic data collection for students (e.g., Electronic Health Record or develop data tracking tool)
 - Identify students with seizures/epilepsy
 - Participate in NASN's National School Health Data Set, Every Student Counts
 - Flag students with seizures/epilepsy
 - Type(s) of seizure
 - Whether seizures are controlled with medication, diet, Vagus Nerve Stimulation (VNS)
 - Frequency of seizures
 - Number of days absent due to seizures
- ☐ For seizure events that occur at school see:
 - Method to document seizure event - **See C6 Seizure Observation and Documentation Tool and C7 Sample Seizure Documentation Log**
- ☐ Post event de-briefing following seizure event
 - Review event data
 - Identify gaps in mitigation measures and response plan guidance
 - Identify other concerns – (e.g., need to provide counseling for any students who witnessed the event.)
- ☐ For students who self-carry a VNS/RNS magnet
 - Competencies of knowledge and response skills documented
 - Number of self-carry spot checks completed by school nurse and results
- ☐ Staff Training
 - Develop tracking tool for yearly staff training and any other additional review training.
- ☐ Annual review of school Seizure Response Policy and Seizure Management Program/protocols and update as needed. Annual review of data and share with school leaders and school board. Consider trends, gaps, any new state laws, or nursing practice regulations for students who experience seizures.

RESOURCES SUPPORTING STUDENTS WITH EPILEPSY AND THEIR FAMILIES

Learning that a student has a diagnosis of seizures or epilepsy at any age can be challenging for any parent. Learning how to best care for their child/youth takes support (CDC, 2021). The teenage years can be especially challenging for a student with epilepsy. Parents can make a difference in their youth by teaching them to care for themselves. The CDC has put together a toolkit for parents of teens with epilepsy called You Are Not Alone (CDC, 2019). This toolkit has both a guide for parents and a facilitator's guide. You Are Not Alone provides guidance on topics such as talking with and learning from other parents and discusses issues like driving, dating, medications and more (CDC, 2019).

The American Academy of Pediatrics also has helpful epilepsy resources for families. These resources include a 24/7 helpline (for people with epilepsy, care givers, or others interested in epilepsy); a link to first aid training and certification; information on Sudden Unexpected Death in Epilepsy (SUDEP) and more (AAP, 2022).

The following is a list of resources from multiple groups that school nurses can use to coordinate care and support parents.

Training/Education	Epilepsy Care Considerations for School Nurses: Stigma and Sudden Unexplained Death in Epilepsy (SUDEP) https://learn.nasn.org/courses/54220
	Transition for Students with Epilepsy: The Role of the School Nurse Panel Presentation https://learn.nasn.org/courses/55489
Classroom Resources	Centers for Disease Control and Prevention (2023) BAM! Body and Mind Healthy Schools CDC
Family support/Services	Epilepsy Foundation, (2023). You can access a list of local epilepsy support groups at: https://www.epilepsy.com/events?f%5B0%5D=event_type%3A33196
	Epilepsy Alliance America Support groups
	Epilepsy Foundation Find your local Epilepsy Foundation Resources for children with developmental and epileptic encephalopathy Locate an Epilepsy Treatment Center
	American Academy of Pediatrics (2022). Helpful resources for patients and families. https://www.aap.org/en/patient-care/epilepsy/managing-pediatric-epilepsy/helpful-epilepsy-resources-for-patients-and-families/
	Centers for Disease Control and Prevention (2021). Information for Parents – What Parents of Children with Epilepsy Can Do. https://www.cdc.gov/epilepsy/groups/parents.htm
	Centers for Disease Control and Prevention (2019). You are not alone toolkit. https://www.cdc.gov/epilepsy/toolkit/index.htm
	Epilepsy Alliance America. (2023). https://www.epilepsyallianceamerica.org/
	Epilepsy Foundation. (2023). https://www.epilepsy.com/
	Epilepsy Foundation (2023). Epilepsy Foundation Individual and Family Services https://www.epilepsy.com/programs/family-services#Support-Groups
	Epilepsy Foundation (2023). Events. https://www.epilepsy.com/events?f%5B0%5D=event_type%3A33196