

Managing **STUDENTS** *with* **SEIZURES**



A Training for School Nurses



**EPILEPSY
FOUNDATION**

Eastern Pennsylvania



*National
Association of
School Nurses*

About Us:

- ▶ The Epilepsy Foundation Eastern Pennsylvania is a non-profit organization dedicated to stopping seizures and SUDEP (Sudden Unexplained Death in Epilepsy) finding a cure and overcoming the challenges created by epilepsy through efforts including education, advocacy and research to accelerate ideas into therapies.
- ▶ We serve individuals and families affected by seizure disorders by focusing on education, advocacy and the non-medical needs of the epilepsy community.

About Us:

- ▶ We offer a range of educational programs and services, including...
 - ▶ Support groups
 - ▶ Camp Achieve & Young Adult Retreat
 - ▶ Parent Consultations on school & community access issues
 - ▶ Educational Conferences
- ▶ Our staff can repeat this training webinar for your school or provide in-person training for school staff and students.

Webinar Housekeeping

- ▶ Audio will work best using the call in number:
 - ▶ +1 (415) 655-0052, access code: 962-869-433
 - ▶ OR using headphone with your computer speakers.
- ▶ If you have a question during the session, please use the question pane. It is recommended to choose “Organizers and Panelists Only” so that you do not disrupt audience members. Questions will be addressed at the end of the webinar.
- ▶ **There is a post-survey required to receive CE credits.** The survey will not start until the conclusion of the webinar. It will also be sent to you via email if you are unable to complete right away.

Presenter

DENNIS DLUGOS, MD

Dennis J. Dlugos, MD, is Professor of Neurology and Pediatrics in the Perelman School of Medicine at the University of Pennsylvania; and Director, Pediatric Epilepsy Program at The Children's Hospital of Philadelphia (CHOP). He is Chair of the American Epilepsy Society's Education and Professional Development Committee. Dr. Dlugos serves as Vice-President of the Epilepsy Study Consortium, which is dedicated to improving the quality of epilepsy clinical trials. His clinical interests include clinical trials, epilepsy genetics and epilepsy surgery. Dr. Dlugos has mentored 30 pediatric epilepsy fellows. He has lectured extensively throughout the US, Europe, South America and Asia.

Purpose

Provide information, strategies and resources that will enable you, the school nurse, to more effectively manage the student with seizures by:

- Supporting positive treatment outcomes
- Maximizing educational and developmental opportunities
- Ensuring a safe and supportive school environment

Role of School Nurse in Managing Students with Seizures

- Recognize seizure activity and its impact on students
- Insure appropriate seizure first aid is given while minimizing stigma
- Coordinate ongoing treatment with the student, parents, the school, the healthcare team
- Train teachers and other personnel to recognize and manage seizures and minimize stigma
- Help to create an environment in which the child continues to achieve educational goals

Training Modules

1. Recognizing Seizures and their Impact
2. Current Treatment Options and their Side Effects
3. Seizure First Aid
4. Seizure Action Plans
5. Training Teachers and Other School Personnel

Managing **STUDENTS** *with* **SEIZURES**

Module I



Recognizing Seizures and their Impact



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Learning Objectives: Module I

- Define epilepsy and differentiate among common seizure types
- Define the concepts of intractability and status epilepticus
- Describe the impact of epilepsy on student learning, behavior and quality of life
- Identify situations that might necessitate supportive counseling for students, parents and teachers
- Recognize when referrals to specialists might be beneficial

Where it all begins....

Effective management begins with....

- Recognizing
- Observing
- Documenting

This can be challenging because symptoms are often:

- Subtle
- Difficult to detect
- Occur without warning
- Confused with other behavioral or psychological problems

What is Epilepsy?

- Epilepsy is a disorder or condition characterized by the tendency to have recurrent unprovoked seizures

recurrent = 2 or more

- Epilepsy is also called a SEIZURE DISORDER

Epilepsy is surprisingly common

Magnitude

- 2.2 million people in the United States and more than 65 million people worldwide have epilepsy;
- 150,000 new cases of epilepsy are diagnosed in the United States annually;
- 1 in 26 people in the United States will develop epilepsy at some point in their lifetime;
- Children and older adults are the fastest-growing segments of the population with new cases of epilepsy;
- Epilepsy is the fourth most common neurological disorder in the United States after migraine, stroke, and Alzheimer's disease

A young boy with short brown hair, wearing a light blue t-shirt, is seen from behind, raising his right hand in a classroom. Other students are blurred in the background. The text is overlaid on the right side of the image.

1 in 26 people will
develop **epilepsy**
at some point

That's about one child
in *every* classroom

#IOMepilepsy
#1in26

iom.edu/epilepsy



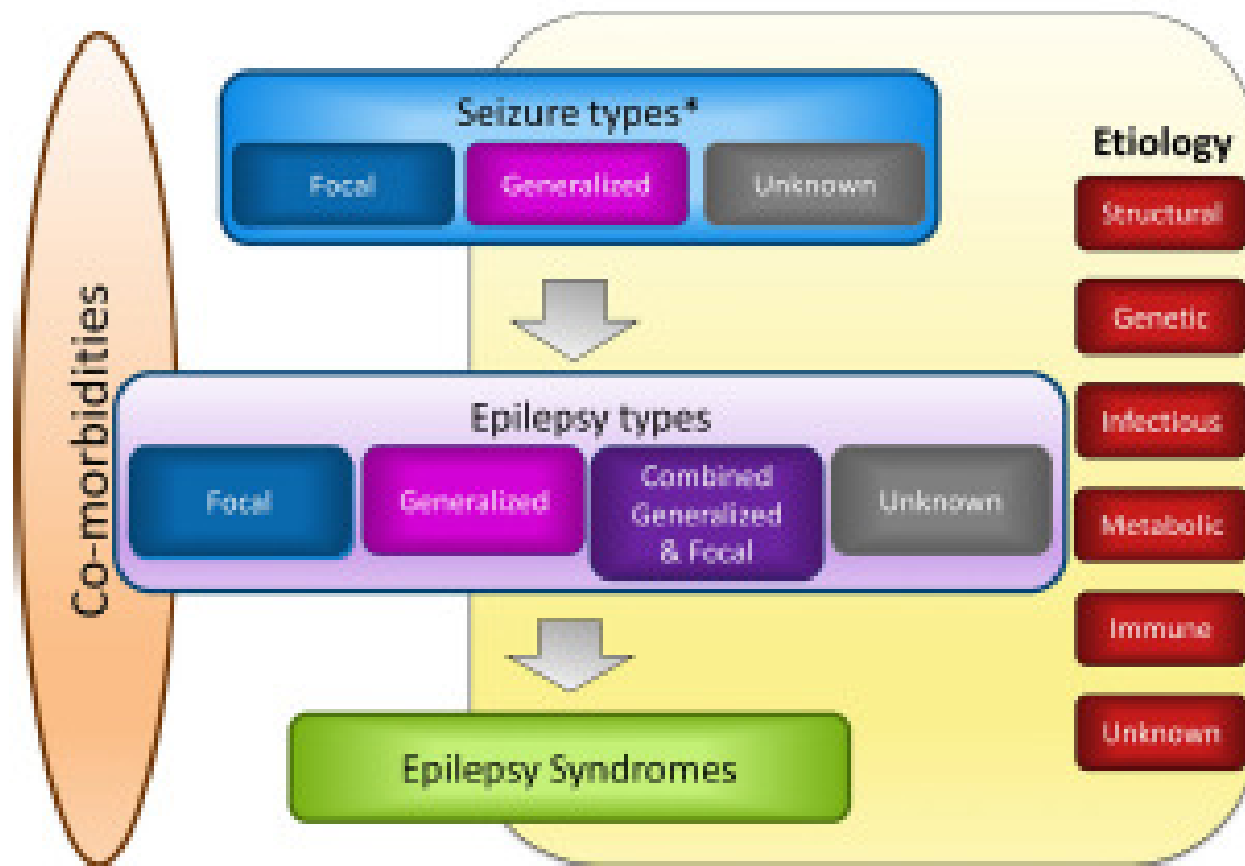
INSTITUTE OF MEDICINE

OF THE NATIONAL ACADEMIES

Students with Epilepsy

- Students often outgrow epilepsy and are seizure free as adults
- Majority of seizures are not emergencies but a part of daily life
- Some students have more than one type of seizure
- Many students have complete or almost complete seizure control when they take medication as prescribed

Epilepsy Classification – 2017 - ILAE



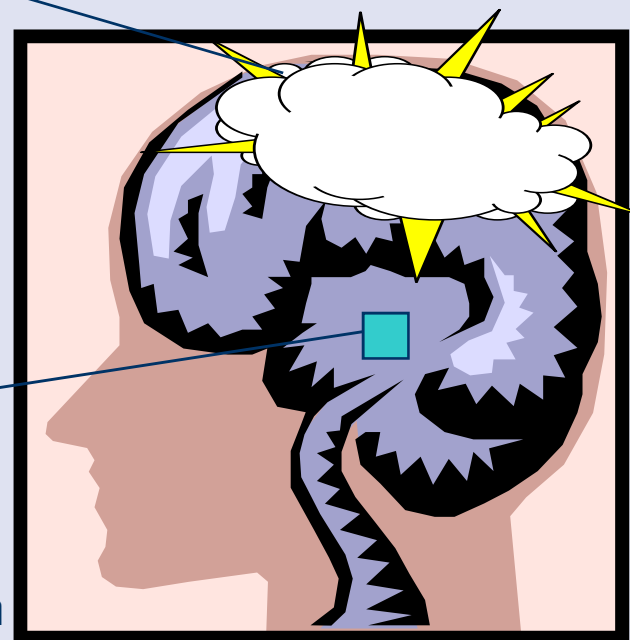
Seizure Classification

● Generalized Seizures

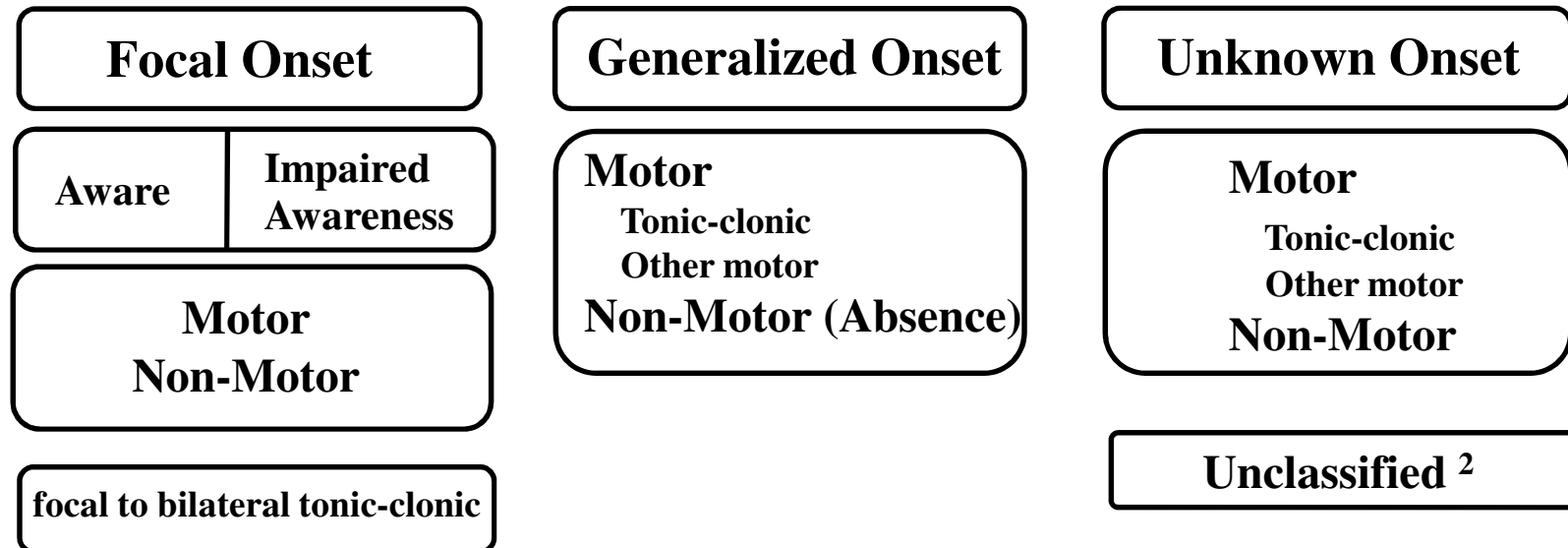
- Involves whole brain
- Convulsions, staring, muscle spasms, and falls
- Most common are absence & tonic-clonic

● Focal Seizures

- Involves only part of brain
- Awareness intact or impaired
- Symptoms relate to the part of brain effected



ILAE 2017 Classification of Seizure Types Basic Version ¹

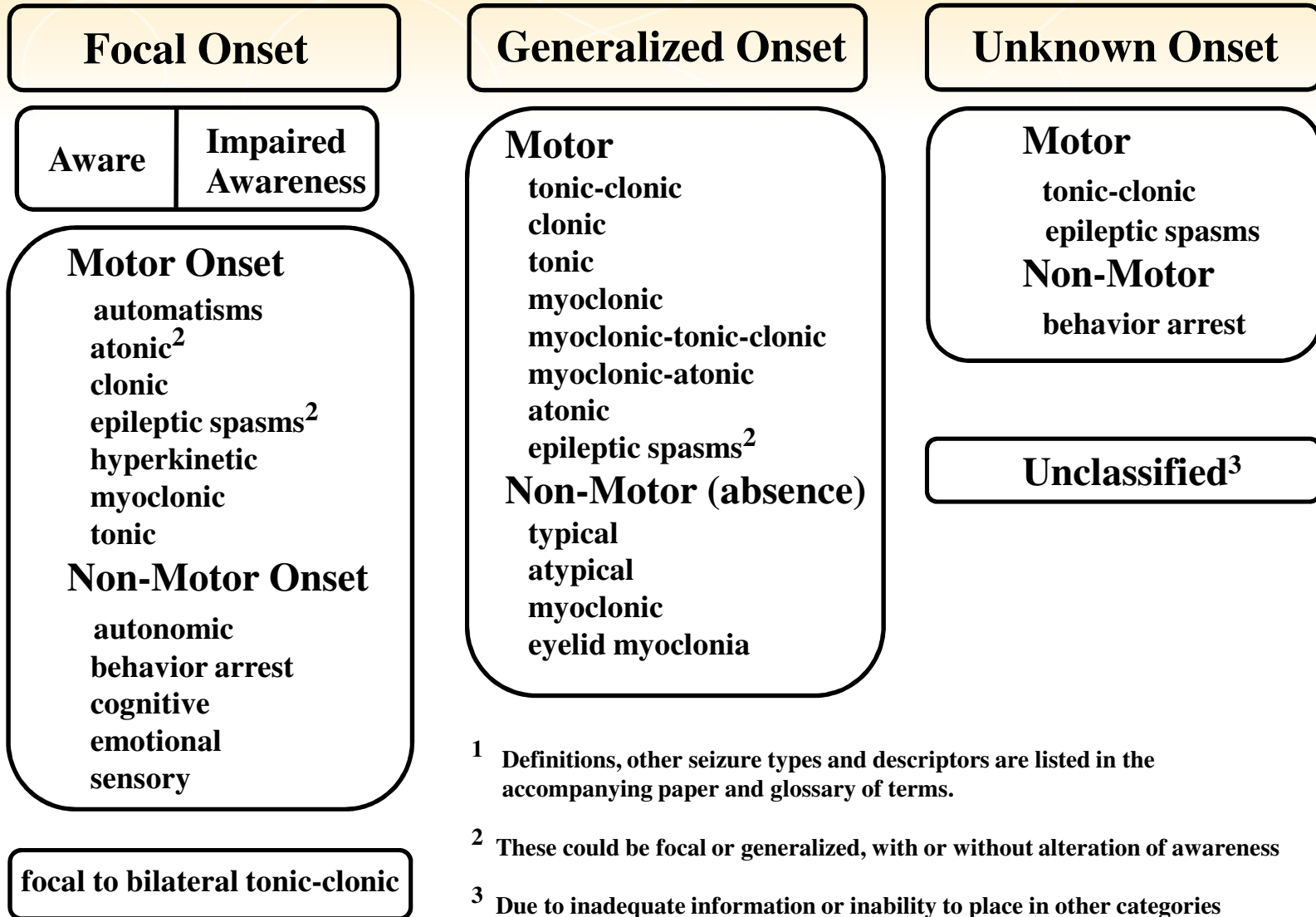


¹ Definitions, other seizure types and descriptors are listed in the accompanying paper & glossary of terms

² Due to inadequate information or inability to place in other categories

From Fisher et al. *Instruction manual for the ILAE 2017 operational classification of seizure types*. *Epilepsia* doi: 10.1111/epi.13671

ILAE 2017 Classification of Seizure Types Expanded Version¹



¹ Definitions, other seizure types and descriptors are listed in the accompanying paper and glossary of terms.

² These could be focal or generalized, with or without alteration of awareness

³ Due to inadequate information or inability to place in other categories

From Fisher et al. *Instruction manual for the ILAE 2017 operational classification of seizure types*. *Epilepsia* doi: 10.1111/epi.13671

Causes of Seizures

- Brain trauma
- Brain lesions (e.g. tubers)
- Infections of the brain (e.g. meningitis, encephalitis, measles)
- Congenital malformations
- Genetic abnormality
- Unknown (50-70%)

Seizure Triggers and Precipitants

- **Most often – no reliable triggers**
 - **Exception – missed medication doses**
- **Other possible triggers**
 - **Illness**
 - **Staying up all night**
 - **Alcohol or drug use**

Common Generalized Seizures

- **Absence** (staring)
- **Atonic** (drop attacks)
- **Myoclonic** (rapid, brief muscle jerks)
- **Tonic-clonic** (convulsions)

Tonic-Clonic Seizure

- A sudden hoarse cry
- A fall
- Rigidity
- Convulsions (tensing and releasing)
- Shallow breathing and drooling may occur
- Possible loss of bowel or bladder control
 - Occasionally skin may turn blue
 - Lasts 2 to 3 minutes
 - Usually followed by confusion, headache, tiredness, soreness, speech difficulty

Absence Seizures

- Blank stare
- Possible chewing or blinking motion
- Usually Lasts 1-10 seconds
- May be confused with:
 - Daydreaming
 - Lack of attention
 - ADD

Focal Aware Seizures

- Consciousness is not impaired
- Involuntary movements (isolated twitching of arms, face, legs)
- Sensory symptoms (tingling, weakness, sounds, smells, tastes, visual distortions)
- Psychic symptoms (déjà vu, hallucinations, fear, anxiety, “a feeling they can’t explain”)
- Duration usually less than 1 minute
- May be confused with: **acting out, mystical experience, other behaviors**

Focal Impaired Aware Seizures

- Altered awareness
- Blank stare/dazed look
- AUTOMATISMS (picking at clothes, lip smacking, chewing)
- Nonsensical speech or lip smacking
- Clumsy or disoriented movements
- Aimless walking
- Picking things up
- Often lasts 1 to 3 minutes
- Often followed by tiredness, headache, or nausea.
- May be confused with:
 - Drunkenness or drug abuse
 - Aggressive behavior

Treatment-Resistance

Students with persistent seizures...

- Fail to respond to standard antiepileptic drug therapy or other treatment modalities
- May have underlying structural brain or neurological conditions
- *Pose the greatest challenge for the school nurse*

Status Epilepticus

- Medically defined as 30 minutes of uninterrupted seizure activity and may include:
 - one prolonged seizure or
 - multiple seizures without recovery to baseline
- Is a “**medical emergency**” and requires immediate action to stop the seizure activity
- Every student’s seizure action plan should clearly define what constitutes a seizure emergency and detail an emergency response plan

- 
- A photograph of an iceberg floating in the ocean. The tip of the iceberg is visible above the water surface, while the much larger, submerged part is visible below. The sky is blue with some clouds, and the water is a deep blue. The iceberg is white and blue, with some snow on top.
- **Seizures are the tip of the iceberg**

- **Treatment side effects**
- **Non-seizure conditions**
 - Developmental disorders, autism
 - Cognitive impairment, attention deficits
 - Psychiatric disorders
 - Socialization challenges

Factors that Impact the Student with Seizures

Factors:

- Seizures
- Medication side effects
- Underlying brain abnormalities

Affect:

- Learning
- Behavior
- Self-concept
- Stigma
- Psychosocial development
- Overall quality of life

Impact on Learning

- Most students with epilepsy have IQ's within the normal range
- Risk of learning problems is 3x greater than average
- Students who experience seizures may have difficulty with learning, memory, attention and concentration
- Students may be eligible for special education and related services
- Students who achieve seizure control quickly, with few medication side effects, have the best chance for normal educational achievement

Impact on Psychosocial Development

There is an association between seizures/epilepsy and the following:

- Impaired self-image/self-confidence (Shame/embarrassment)
- Low self-esteem
- Anxiety
- Delayed social development

Once seizures are under control, the psychosocial impact may outweigh the medical impact.

Psychogenic Non-epileptic Events (PNEE)

- Events that may look like epileptic seizures but on EEG monitoring have no correlate
- Also called non-epileptic seizures
- Video-EEG monitoring is the most effective way of diagnosing
- Can be caused by a variety of medical and psychological factors

In A Recent Survey of 20,000 Teens:

- More than 50 percent had never heard of or read about epilepsy
- 37 percent said teens with epilepsy are more likely to get picked on
- More than 50 percent said they would not, or were not sure if they would date a person with epilepsy
- 19 percent thought that epilepsy was a form of mental illness
- 52 percent thought that people die from seizures

Strategies for Reducing Stigma (1)

- Incorporate epilepsy education into health curricula for all students – *include seizure first aid*
- Appreciate the spectrum of epilepsy -hidden nature and uniqueness of individual experiences
- Be aware of cultural differences
- Support student with getting involved in extracurricular activities
- Look beyond the seizures – assess the impact. Coordinate a team approach
- Help the student and family understand any limitations that the doctor may put on the student

Strategies for Reducing Stigma (2)

- Educate all school personnel to assist with minimizing stigma (myths, first aid, support strategies)
- Prevent bullying and teasing when possible
- Teach coping strategies for managing life and school
- Help enhance independence - address parental over-protectiveness if necessary
- Be a resource. Put the family in contact with the Epilepsy Foundation affiliate and any other resource that may be of help

Supportive Counseling

- Medication compliance
- Learning and school performance
- Dating, driving, and disclosure
- Parental over-protectiveness
- Minor memory and learning impairments
- Socialization issues (anger, withdrawal, embarrassment)
- Dealing with limitations imposed by doctor
- Connect student and family with Epilepsy Foundation affiliate.

Refer to an Epilepsy Center...

- Uncontrolled seizures and status epilepticus
 - When not already under the care of a specialist
- Significant mood and anxiety disturbances
- Major memory and learning deficits
- Sudden change in seizure type

Managing
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Module II



**Current
Treatment
Options**



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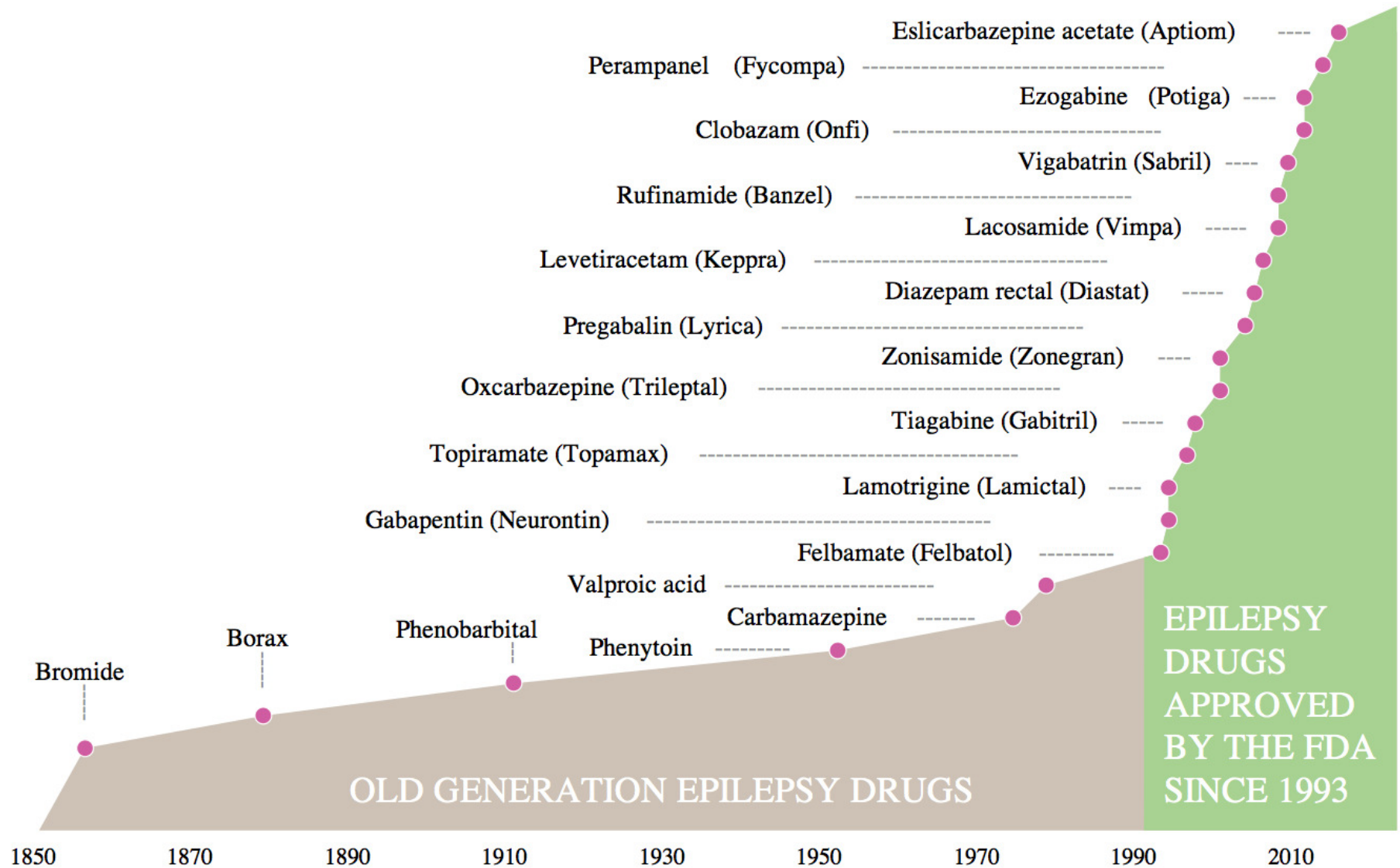
Learning Objectives: Module II

- Identify the four most common treatment options for students with seizures
- Identify side effects, risks and efficacy of various treatment options
- Know key issues related to the delegation of medication administration

Treatment Options

- Antiepileptic Drugs (AEDs)
 - PRN medications (acute seizures and seizure emergencies)
- Surgery
- Ketogenic Diet
- Neuro-Stimulation

Anti-epileptic drug (AED) options



Side Effects of AEDs

- AEDs can have side effects such as double vision, sedation, dizziness, weight gain, ataxia or other motor function impairment
- Newer medications generally have fewer cognitive side effects
- AED side effects can be unpredictable. Some are dose dependent and can result in depression, hyperactivity, personality changes and reduced intellectual functioning
- Long term effects are unclear but even mild side effects can have a significant impact

Drug Reaction Warning Signs

- Rash
- Prolonged fever
- Severe sore throat
- Mouth ulcers
- Easy bruising
- Weakness
- Excessive fatigue
- Swollen glands
- Lack of appetite
- Increased seizures

Contact
Child's
Care
Provider

THESE ARE SERIOUS BUT NOT COMMON!

Surgery for Seizures

- Considered after trying multiple medications
- Surgical evaluation includes inpatient video/EEG monitoring for 5 to 10 days
- Other tests may include: MRI, SPECT scan, PET scan, and neuropsychological testing
- Procedures include focal resection, temporal lobectomy, lesionectomy, and corpus callosotomy
- Post-surgical seizure-free rates are greater than 60 to 75 percent
- Patients usually go home after 7 days in the hospital and will likely miss several weeks or months of school

Ketogenic Diet

- Introduced in the 1920s as a treatment for intractable seizures
- Produces ketotic state using diet high in fat and low in protein and carbohydrates
- Used mostly with children
- Effective for all seizure types
- Requires 2 to 3 days fasting followed by strict diet
- Compliance is problematic
- Side effects can include renal calculi, weight loss, cardiomyopathy and blood abnormalities
- Researchers still don't know exactly how it works



Vagus Nerve Stimulation (VNS) Therapy

- A programmable pulse generator implanted subcutaneously in upper left chest
- Electrode wrapped around the left vagus nerve
- Exact mechanism of action not known
- Side effects may include hoarseness, coughing, and shortness of breath and occur during stimulation only



VNS Magnet Use

- Typically worn on wrist or belt
- If the student has a seizure warning sign (aura) he/she or a trained observer may swipe the magnet over the VNS device to help abort seizure
- Magnet may be swiped during an actual seizure to shorten seizure length
- Magnet may be used as often as needed with at least a minute between swipes
- For free video and more information visit www.vnstherapy.com.

PRN Medications for Seizures

Sometimes AEDs are prescribed for students who tend to have seizure clusters or status epilepticus. Several of these include:

- Diazepam rectal gel (Diastat®)
- Lorazepam (Ativan®) solution
- Clonazepam (Klonopin) wafer
- Midazolam IV given in cheek or nose

Diazepam Rectal Gel Administration in Schools

- Approved by the FDA for use by family members and other non-medical caregivers
- Often referred to as a seizure rescue medication
- State nurse practice acts and local school districts may have specific regulations regarding administration
- Primary concerns expressed by other school nurses include **privacy, ability to assess when to administer, and respiratory depression**
- If use is recommended by a doctor, regulations and impact on the student must be discussed with parents to come to workable solution

Diazepam Rectal Gel (continued)

- **What are your state or school district regulations?**
- **What additional concerns do you have?**
- **What really happens in your schools with Diastat use?**

For more information a free video visit
www.diastat.com

The Challenge of Delegation

- Students can not legally be excluded from school activities without a physician's order

HOWEVER...

- There may nobody willing to take on the delegated responsibilities
- May encounter angry parents who want child included in all activities
- How have you dealt with this situation?

Helpful Hints When Explaining Delegation Issues

- Bring parents and school personnel together to attempt to find workable solution
- Explain that you are obligated to put the health, safety and welfare of the student first
- Discuss state nurse practice act and school district policies
- Briefly discuss any applicable state and federal mandates and laws
- Determine if a nursing task can be delegated

More Helpful Hints When Explaining Delegation Issues

If task can be delegated, explain the following:

- Nurse is responsible for designating and training willing and appropriate delegate(s)
- Need for ongoing assessment and documentation of the competence of delegate(s)
- Need for ongoing assessment of the student's health outcome

Remember...over the long term it may be possible to change school policy and personnel attitudes.

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Module III

Seizure First Aid



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Learning Objectives: Module III

- Provide appropriate basic first aid for a student during and after a seizure
- Identify when a seizure is an emergency and know the appropriate response

Routine First Aid: Care and Comfort

- Most seizures are not medical emergencies
- Basic first aid has many common elements but varies depending whether there is:
 - Altered awareness
 - Loss of consciousness

No change in Consciousness

(Focal aware seizure)

- Stay calm
- Time seizure
- Reassure student that he or she is safe
- Explain to others if necessary
- Protect student's privacy



Altered Awareness

(Focal impaired aware seizure)

- Speak softly and calmly
- Direct away from potentially harmful objects such as tables, chairs and doors
- Allow for wandering in contained area
- If lasts 5 minutes beyond what is routine for that student or another seizure begins before full consciousness, follow emergency protocol
- DO NOT restrain or grab (may result in combativeness)
- DO NOT shout or expect verbal instructions to be obeyed

Loss of Consciousness

(Generalized Tonic-Clonic)

- Help to lie down if necessary
- Protect from potentially harmful objects
- Observe and time events
- Ensure airway is unobstructed
- Cushion and protect head
- Turn child on side
- Follow your Seizure Action Plan.
- DO NOT put anything in mouth
- DO NOT restrain

When is a Seizure an Emergency?

- First time seizure
- Convulsive seizure lasting more than 5 minutes
- Repeated seizures without regaining consciousness
- More seizures than usual or change in type
- Student has diabetes or is pregnant
- Seizure occurs in water
- Student is Injured
- Parents request emergency evaluation

Follow seizure emergency definition and protocol as defined by healthcare provider in seizure action plan

Use of PRN Medications

- Prescribed for seizure clusters and prolonged seizures
- Emergency Protocol should include:
 - Medication name
 - Details about exactly when it should be given
 - Specific administration instructions
- Monitor responses and side effects
- Follow seizure action plan emergency response protocol

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Module IV

**SEIZURE ACTION
PLANS**



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Learning Objectives: Module IV

- Describe the steps in the seizure action planning process
- Identify the essential components of a seizure action plan

An Emergency Care Plan Should Include:

“... specific information (so that) . . . when an emergency occurs, school nurses, school personnel, and emergency care providers have the information needed to provide appropriate care to the child without delay.”

The position of the NASN
on Emergency Care Plans (ECP)
for Students with Special Health
Care Needs

SEIZURE ACTION PLANNING

- Assess student needs and gather information
- Customize a seizure action plan
- Teach school personnel and tailor interventions as needed

Managing STUDENTS with SEIZURES



MY SEIZURE PLAN

Epilepsy Foundation Eastern PA
919 Walnut Street, Suite 700
Philadelphia, PA 19107



MY SEIZURE PLAN

Epilepsy Foundation Eastern PA
919 Walnut Street, Suite 700
Philadelphia, PA 19107

Name: _____ Birth Date: _____
 Address: _____ Phone: _____
 1st Emergency Contact: _____ Relation: _____
 Phone(s): _____ Email: _____
 2nd Emergency Contact: _____ Relation: _____
 Phone(s): _____ Email: _____

SEIZURE INFORMATION

Seizure Type/Nickname	What Happens	How Long It Lasts	How Often

TRIGGERS

DAILY SEIZURE MEDICINE

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

OTHER SEIZURE TREATMENTS

Device Type: _____ Model: _____ Serial#: _____ Date Implanted: _____
 Dietary Therapy: _____ Date Begun: _____
 Special Instructions: _____
 Other Therapy: _____

SEIZURE FIRST AID

- Keep calm, provide reassurance, remove bystanders
- Keep airway clear, turn on side if possible, nothing in mouth
- Keep safe, remove objects, do not restrain
- Time, observe, record what happens
- Stay with person until recovered from seizure
- Other care needed: _____

WHEN SEIZURES REQUIRE ADDITIONAL HELP

Type of Emergency (long, clusters or repeated events)	Description	What to Do

"AS NEEDED" TREATMENTS (VNS magnet, medicines)

Name	Amount to Give	When to Give	How to Give

CALL 911 OR SEEK EMERGENCY MEDICAL ATTENTION IF ...

- Generalized seizure longer than 5 minutes
- Two or more seizures without recovering between seizures
- "As needed" treatments don't work
- Injury occurs or is suspected, or seizure occurs in water
- Breathing, heart rate or behavior doesn't return to normal
- Unexplained fever or pain, hours or few days after a seizure
- Other care needed: _____

HEALTH CARE CONTACTS

Epilepsy Doctor: _____ Phone: _____
 Nurse/Other Health Care Provider: _____ Phone: _____
 Preferred Hospital: _____ Phone: _____
 PCP or Other Doctor: _____ Phone: _____
 Pharmacy: _____ Phone: _____

SPECIAL INSTRUCTIONS:

 My signature _____ Provider signature _____ Date _____

Parent Questionnaire



Questionnaire for Parent of Child with Seizures

Please complete all questions. This information is essential for the school nurse and school staff in determining your child's special needs and providing a positive and supportive learning environment. If you have any questions about how to complete this form, please contact your child's school nurse.

Contact Information			
Student's Name	School Year	Date of Birth	
School	Grade	Classroom	
Parent/Guardian	Phone	Work	Cell
Parent/Guardian Email			
Other Emergency Contact	Phone	Work	Cell
Child's Neurologist	Phone	Location	
Child's Primary Care Doctor	Phone	Location	
Significant medical history or conditions			

Seizure Information

- When was your child diagnosed with seizures or epilepsy? _____
- Seizure type(s)

Seizure type	Length	Frequency	Description
- What might trigger a seizure in your child? _____
- Are there any warnings and/or behavior changes before the seizure occurs? YES NO
If YES, please explain: _____
- When was your child's last seizure? _____
- Has there been any recent change in your child's seizure patterns? YES NO
If YES, please explain: _____
- How does your child react after a seizure is over? _____
- How do other illnesses affect your child's seizure control? _____

Basic First Aid: Care & Comfort

- What basic first aid procedures should be taken when your child has a seizure in school? _____
- Will your child need to leave the classroom after a seizure? YES NO
If YES, what process would you recommend for returning your child to classroom? _____

Basic Seizure First Aid
<input type="checkbox"/> Stay calm & track time <input type="checkbox"/> Keep child safe <input type="checkbox"/> Do not restrain <input type="checkbox"/> Do not put anything in mouth <input type="checkbox"/> Stay with child until fully conscious <input type="checkbox"/> Record seizure in log For tonic-clonic (grand mal) seizure: <input type="checkbox"/> Protect head <input type="checkbox"/> Keep airway open/watch breathing <input type="checkbox"/> Turn child on side

Seizure Emergencies	A seizure is generally considered an emergency when:
11. Please describe what constitutes an emergency for your child? (Answer may require consultation with treating physician and school nurse.) _____ 12. Has child ever been hospitalized for continuous seizures? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, please explain: _____	<input type="checkbox"/> Convulsive (tonic-clonic) seizure lasts longer than 5 minutes <input type="checkbox"/> Student has repeated seizures without regaining consciousness <input type="checkbox"/> Student is injured or has diabetic <input type="checkbox"/> Student has a first-time seizure <input type="checkbox"/> Student has breathing difficulties <input type="checkbox"/> Student has a seizure in water

Seizure Medication and Treatment Information				
13. What medication(s) does your child take?				
Medication	Date Started	Dosage	Frequency and time of day taken	Possible Side Effects
14. What emergency/rescue medications are prescribed for your child?				
Medication	Dosage	Administration Instructions (Timing* & method**)	What to do after administration	

*After 2nd or 3rd seizure, for cluster of seizure, etc. **Orally, under tongue, rectally, etc.

- What medication(s) will your child need to take during school hours? _____
- Should any of these medications be administered in a special way? YES NO
If YES, please explain: _____
- Should any particular reaction be watched for? YES NO
If YES, please explain: _____
- What should be done when your child misses a dose? _____
- Should the school have backup medication available to give your child for missed dose? YES NO
- Do you wish to be called before backup medication is given for a missed dose? YES NO
- Does your child have a Vagus Nerve Stimulator? YES NO
If YES, please describe instructions for appropriate magnet use: _____

Special Considerations & Precautions
22. Check all that apply and describe any consideration or precautions that should be taken: <input type="checkbox"/> General health _____ <input type="checkbox"/> Physical education (gym/sports) _____ <input type="checkbox"/> Physical functioning _____ <input type="checkbox"/> Recess _____ <input type="checkbox"/> Learning _____ <input type="checkbox"/> Field trips _____ <input type="checkbox"/> Behavior _____ <input type="checkbox"/> Bus transportation _____ <input type="checkbox"/> Mood/coping _____ <input type="checkbox"/> Other _____

General Communication Issues
23. What is the best way for us to communicate with you about your child's seizure(s)? _____ 24. Can this information be shared with classroom teacher(s) and other appropriate school personnel? <input type="checkbox"/> YES <input type="checkbox"/> NO
Parent/Guardian Signature _____ Date _____ Dates Updated _____ DPC776

Seizure Observation Record

Seizure Observation Record



Student's name: _____

Date & Time				
Seizure Location				
Pre Seizure Observation (Briefly list behaviors, feelings, events, activities)				
Conscious (yes/no/Partial)				
Tonics (briefly describe)				
Muscle Posture/Movements	- Rigidity			
	- Jerk			
	- Roll over			
	- Clonus			
	- Involuntary arm/leg			
Extremity Movements	- (R) arm jerking			
	- (L) arm jerking			
	- (R) leg jerking			
	- (L) leg jerking			
	- Rhythmic Movement			
Cyanosis	- Blue			
	- Pale			
	- Blushed			
Eyes	- Pupils Dilated			
	- Pupils (R or L)			
	- Dilated			
	- Strabismic or Exotropia (laterality)			
	- Closed			
Mouth	- Salivating			
	- Chewing			
	- Lip smacking			
Verbal Sounds describe (gagging, talking, thrash, clearing, etc.)				
Smacking describe (normal, forceful, repeated, rapid)				
Environment (in room/outside)				
Post-ictal Observation	- Confused			
	- Sleepy			
	- Awakened			
	- Sweaty skin			
	- Dilated			
Target orientation				
Duration satisfied? (note time of seizure)				
EMS called? (yes, call and arrival time)				
Observer's Name				

www.efepa.org

215-629-5003

efepa@efepa.org

What Teachers Need to Know



Did you know that:

- Most seizures are NOT medical emergencies
- Students are often NOT aware they are having a seizure and will not remember what happened
- Epilepsy is NOT contagious
- Epilepsy is NOT a form of mental illness
- Students very rarely die or have brain damage during a seizure
- Students do NOT become violent during a seizure
- A student CANT swallow his/her tongue during a seizure
- You should NEVER put anything in the mouth of someone having a seizure



Epilepsy can impact learning and behavior.

Here are some things to keep in mind:

- Seizures may cause short term memory problems
- After a seizure, coursework may have to be re-taught
- Seizure activity, without obvious physical symptoms, can still affect learning
- Medications may cause drowsiness, inattention, concentration difficulties and behavior changes
- Students with epilepsy are more likely to suffer from low self esteem
- School difficulties are not always epilepsy-related



www.efepa.org

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Communication Tips

- Set up a plan for communicating with parent/guardian
- Be a liaison for parents and teachers
- Have teachers regularly note physical, emotional or cognitive changes
- Create a “substitute teacher” folder with seizure action plan and other relevant information. Keep copy in the nurse’s office and with the student’s teacher

Managing
STUDENTS
with **SEIZURES**

Module V



**TRAINING TEACHERS
AND OTHER SCHOOL
PERSONNEL**



**EPILEPSY
FOUNDATION**

Eastern Pennsylvania



*National
Association of
School Nurses*

Learning Objectives: Module V

- Identify the essential elements of seizure training for school personnel
- Locate additional training assistance and resources

Training is Important

- Helps enlist full cooperation
- Optimizes ability to manage seizures and consequences
- Insures full integration of child in school activities
- Minimizes stigma

Goal of Training for School Personnel

- Recognize seizures and consequences
- Provide appropriate first aid
- Recognize when a seizure is a medical emergency
- Provide appropriate social and academic support
- Understand the Seizure Action Plan

Essential Training Topics

- What is a seizure? What is epilepsy?
- Who has epilepsy?
- What do seizures look like?
- What are common myths about epilepsy?
- What is appropriate first aid for seizures?
- When is a seizure an emergency?
- What causes seizures?

More Essential Training Topics

- What are common seizure triggers?
- What can be done to prevent stigma?
- How to implement a seizure action plan
- Special issues in treatment/first aid:
 - Use of the Ketogenic diet
 - Use of the vagus nerve stimulator magnet
 - Use of rescue medication including Diastat®

Optional Topics

- In the classroom
- Outside the classroom (playground, field trips, etc.)
- Students in a wheelchair
- On a school bus
- In the water



Convulsive Seizure in Wheelchair

- Do not remove from wheelchair unless absolutely necessary
- Secure wheelchair to prevent movement
- Fasten seatbelt (loosely) to prevent child from falling from wheelchair
- Protect and support head
- Ensure breathing is unobstructed and allow secretions to flow from mouth
- Pad wheelchair to prevent injuries to limbs
- Follow relevant seizure first aid protocol

Seizure on a School Bus

- Safely pull over and stop bus
- Place child on side across seat facing away from seat back (or in aisle if necessary)
- Follow standard seizure first aid protocol until seizure abates and child regains consciousness
- Continue to destination or follow school policy

Seizure in Water

- Support head so that both the mouth and nose are always above the water
- Remove the student from the water immediately
- If the student is not breathing, begin rescue breathing
- Always transport the child to the emergency room even if he/she appears fully recovered

Handouts & Resources

- First Aid for Seizures
- My Seizure Plan
- Observation Record
- Parent Questionnaire
- Presentation Slides
- EFEPA website: www.efepa.org/programs-and-resources/school/
- EFA website: www.epilepsy.com



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**Contact the Epilepsy Foundation Eastern PA
or Epilepsy Foundation Western Central PA
for more information about local
Pennsylvania resources.**



Epilepsy Foundation Eastern PA
919 Walnut Street, Suite 700
Philadelphia, PA 19107-5237
(215) 629-5003
Website: www.efepa.org
Email: efepa@efepa.org



Epilepsy Foundation Western/Central PA
1501 Reedsdale Street, Suite 3002
Pittsburgh, PA 15233
(412) 322-5880
Website: www.efwp.org
Email: staff@efwp.org