



Transcript of Training Video

Updated: September 2019

Slide 1. Title Slide (00:00)

Welcome to Seizure Training for School Personnel from the Epilepsy Foundation.

This training was developed for anyone who works in a school setting and may come in contact with students with epilepsy.

This is for school nurses, teachers, aides, coaches, administrators or anyone who works with students with epilepsy.

The curriculum was created by the Epilepsy Foundation and reviewed by the Foundation's Professional Board.

Slide 2. (00:38)

How many of you have seen a person having a seizure?

Often when you see a seizure for the first time, you may feel scared, immobilized or just not know what to do.

One of the purposes of this training is to help people understand what a seizure may look like and learn what to do if you're in a situation to help.

Video: (1:01)

[Applause]

[Music]

Announcer: Michael has epilepsy and he is having a Seizure would you know how to help him?

Coach: Stay calm it's gonna be fine help me get him on his side.

Announcer: visit epilepsy.com to see what happened to Michael and learn seizure first-aid.

After viewing that short clip would you know what to do if someone had a seizure? We hope that this training will help answer that question.

Slide 3. Objectives (1:34)

The objectives of this training are to help you:

- Recognize three common seizure types.
- Describe three seizure first aid steps to assist a student having a seizure.
- Recognize three key factors that could make a seizure a medical emergency.
- Describe three ways to help support students living with epilepsy.

Slide 4. The Brain, Seizures and Epilepsy (2:04)

Let's talk about the brain, seizures, and epilepsy.

Slide 5. The Brain and Seizures (2:08)

The human brain has billions of nerve cells in it (called neurons). These nerve cells communicate with one another by sending and receiving electrical impulses. Normally these electrical impulses are carefully coordinated. Yet sometimes there's a temporary change or disruption in the way the brain sends electrical signals - there can be a "short circuit" in the way messages are sent between one cell or group of cells to others. When this happens, a seizure occurs. A seizure is actually the change that happens when the short circuit occurs. It is often called a "storm in the brain."

Any person has the capability of having a seizure but not everyone who has a seizure develops epilepsy.

Some seizures can be provoked by other medical conditions or situations. For example, if a person has marked changes in blood sugar or has developed a high fever or infection or acute injury to the brain, a seizure could happen associated with that acute event. If they don't go on to have other seizure not associated with the acute event, it is called a provoked seizure. They would not be diagnosed with epilepsy.

If, however, a person has more seizures not associated with the acute event, they could have epilepsy.

Slide 6. What does a seizure look like? (3:33)

There are many different types of seizures that can look and feel very different. Most of the time when people hear the word seizure, they think about a person who has collapsed, is not aware of their surroundings, is lying on the ground and having shaking of their body.

That is only one type of seizure – it's often what is seen on TV or in other media.

But seizures can present in many different ways.

- Seizures may look like simple staring episodes, periods of confusions, or just changes in how a person feels or acts. What a seizure looks like depends upon the area of the brain involved.
- Seizures can result in a change in someone's movement, sensation, behavior, speech or their level of awareness.

This picture of the brain with different colors shows different lobes or areas of the brain. Each area of the brain has different functions.

- If a seizure starts in the front area of the brain which is blue - that's the part of the brain that's involved with movements so you might be changes in movement during the seizure.
- The green area is the temporal lobe of the brain and is involved with memory, with emotions, being able to talk and understand. If that area is involved during a seizure, a person could have problems with any of these functions. Each lobe of the brain does something different and so if a seizure is starts in that area or involves that area at any time, you may see those functions affected.

Keep in mind that seizure symptoms or signs of seizures vary from one person to another but they're usually consistent and predictable within each person epilepsy.

Slide 7. What is Epilepsy? (5:24)

What is epilepsy?

Epilepsy is a chronic brain disease characterized by recurrent unprovoked seizures. Recurrent means that seizures recur – a person has more than one or two seizures. Unprovoked means the seizures are not provoked by some acute illness or events previously discussed.

Epilepsy is sometimes referred to as a seizure disorder. Some people might use the term seizure disorder because they think the word epilepsy is scary. But in fact, we make it more scary when we are afraid to use the word epilepsy.

In my opinion – just call it epilepsy.

There are many different types of epilepsy and just being diagnosed with epilepsy doesn't really tell you the kind of seizures that the person may have, the cause, or the outlook.

Slide 8. Anyone can Have Epilepsy (6:17)

Who has epilepsy? Anyone can have epilepsy.

- It occurs at all different ages, though often though in the young or in people 55 or older.
- It can happen to both sexes.
- It can happen to people of any race or socioeconomic status no matter where you live in the world.

Slide 9. Epilepsy by the Numbers (6:37)

- In the United States there's 3.4 million people who have active epilepsy – this refers to people who have been diagnosed or are being treated for epilepsy.
- Almost half a million of these people are 17 years or younger – these are the people that you're going to come in contact with in a school setting.
- At t least one in three people have uncontrolled epilepsy so that means that their current treatment is not working to control seizures.
- Another way to think about epilepsy is to consider the size of a typical classroom – often around 25 or 26. **1 in 26 people will be diagnosed with epilepsy in their lifetime.** It's common and you are likely to see children or youth with epilepsy in your schools.
- Seizures are even more common than epilepsy - 1 in 10 people worldwide will have a seizure during their lifetime.

Slide 10. Did You Know? (7:40)

Did you know?

- Most seizures are not medical emergencies.
- Epilepsy is not contagious.
- A student cannot swallow their tongue during a seizure.
- Epilepsy is a medical disease like asthma or diabetes.
- And everyone can learn seizure first aid.

Slide 11. Common Causes of Epilepsy (7:57)

There are a number of different causes of epilepsy – in over half of the people the cause is not known. For others, common causes may include:

- Brain trauma or injury to the brain.
- Brain lesions such as a tumor or tubers brain or some kind of mass.
- Infections of the brain or the coverings of the brain.
- Injury that might have occurred at birth or shortly before birth.
- Abnormal brain development.
- And stroke - keep in mind that stroke can occur at any age.

Slide 12. Diagnosing Epilepsy (8:35)

- There is no single test to diagnose epilepsy.
- The most critical information is the person's medical history and a description of seizures – learning from the person who's had the seizure what happened, what they recall, or what they felt. Getting information from a person who has observed a seizure is also important. What did they see, where did it start, what happened in the beginning, middle and end. And how long the seizure lasted and how long before the person returned to their normal state.
- Other things are done when you visit a doctor such as a medical and neurological exam, blood tests to rule out other causes of epilepsy, and brain imaging – which are tests like at CT or MRI scan to look at the brain for possible causes.
- An EEG or an electroencephalogram is done to look at the electrical activity of the brain and see if there's any signs of seizure activity (short circuits or storms in the brain). Keep in mind that when a routine EEG is done and a person is not having a seizure, it's typical for an EEG to be normal and not see any abnormal electrical activity. Yet if you record an EEG when a person is having a seizure, abnormal electrical activity is usually seen. This may tell areas of the brain involved in a seizure.

Slide 13. Treating Epilepsy (10:08)

How is epilepsy treated?

- The first line of treatment is with anti-seizure medications also called anti-epileptic drugs. Most people do respond to the first one or two medications tried. Yet for about 40% of people with epilepsy medicines don't work and other treatments should be considered.
- Some people might be able to have epilepsy surgery if seizures can be located in one area of the brain and that area can be removed safely without causing further problems. Other types of surgery may be recommended in specific situations.
- Implanted devices might help by stimulating the brain to stop seizures or prevent them from starting.
- Dietary therapies which are medically prescribed such as the ketogenic diet, a modified Atkins diet, or low glycemic diet can help control seizures in a number of people.
- Investigational medicines that are given during a clinical trial might be helpful.

Slide 14. Types of Seizures (11:21)

So now that we've learned a little bit about epilepsy and diagnosing and treating epilepsy let's talk about the types of seizures that you might see.

Slide 15. Seizure Types (11:32)

1. How seizures are classified or named depends on where they start in the brain.
2. Then it's important to know if a person's awareness is affected and if seizures involved other symptoms such as movement or other changes in behavior.
3. The changes in how seizures are named is important for many reasons. Knowing where seizures start helps guide the type of treatment.

Slide 16. Seizure Types (12:01)

Graphic of two brains

Let's talk about the different types of seizures. There are three main groups or seizure types.

- The first are called focal onset seizures - this means that that they begin in one area of the brain. They may stay in one area or could spread to larger areas on one side, sometimes spread to both sides of the brain. The graphic on the right with the red circle and the arrows shows how a seizure can start locally and spread to surrounding areas. The most common types of focal seizures are called focal aware and focal impaired awareness seizures.
- The next group are called generalized onset seizures. In this type, seizure activity starts in the middle or deep areas of the brain and spread to both sides at once. The graphic on the right demonstrates this with the blue circle and arrows. The most common type of generalized onset seizures are absence and tonic clonic seizures now.
- There are other types of generalized seizures - for example seizures can be called tonic which means the body gets rigid or they can be called clonic where there's just jerking movements of parts of the body or of the whole body or it could be called atonic where there's a loss of tone in

part of the body or the whole body. In an atonic seizure, the body or body part may fall like a 'rag doll' as there is a loss of tone.

- Seizures may also be called unknown onset – this means that we don't know where the seizure is starting. Often happens when a person's seizures haven't been witnessed by anybody else. For example, the person might live alone or maybe the seizures happen at night so beginning of the seizure is not seen. Over time if a good description of a seizure is obtained that shows where it might start, or testing is done that shows the beginning of the seizure then it might be diagnosed as a focal onset or generalized onset seizure.

A key reason to know where a seizure begins is that how you treat someone with epilepsy is going to depend upon where a seizure starts in the brain. The types of medications used or if surgery or other treatments are recommended will vary if it starts on a focal area. If a seizure is generalized from the beginning, the treatment plan might be very different.

Now let's talk about a couple of the frequent or common types of seizures.

Slide 17. Focal Aware Seizures (14:50)

Focal aware seizures used to be called simple partial seizures. The person is aware and alert during the seizure.

- There might be movements on one side or part of the body, for example twitching in part of their face or an arm or a leg or the whole side.
- There could be sensory symptoms like tingling or numbness in the area the body.
- Literally anything that your brain can do normally can also happen during a seizure. If the seizure starts in the area of the brain involving sound, you could hear sounds.
- Tastes or smells could be part of a seizure, or an upset stomach.
- Psychic symptoms like feelings of Deja Vu or hallucinations or unexpected feelings of fear or anxiety or just a funny feeling that's hard to describe.

Usually these focal aware seizures last one to three minutes.

They can be confused with acting out, a psychosomatic illness, a mystical experience or illicit drug use now.

On the next slide you will see a focal impaired awareness seizure. In this seizure the person is not aware.

We used to call this a complex partial seizure. As you watch the video, look at the person's face and movements.

Slide 18. Focal Impaired Awareness Seizure (16:25)

VIDEO: Share My Seizure

[Music]

Wendy: I have Epilepsy and I would like to share my seizure with you. I want you to see it so you won't be afraid.

[inaudible mumbling]

Wendy: When you have Epilepsy you ask yourself: When will the seizure happen? Who will see? Am I still me? But I'd rather ask you. Would you know how to help me when it happens? Do you know there are different seizures and they look very different? Could you have Epilepsy and not know it? There are many questions. Find answers at epilepsy.com

This video shows parts of a focal impaired awareness seizure. The woman was not aware of what was going on and didn't talk during it. She was also fiddling with her hair – this is an example of automatisms or repeated non-purposeful movements.

Main features of this type of seizure includes:

- Their level of awareness – they are confused or unaware of all or parts of the seizure. They may or may not be able to hear what is going on around them.
- They may make sounds that don't make sense, say things that are not relevant to what's going on, or not be able to talk at all.
- Usually there is blank or dazed facial expression.
- Their head or eyes may be turned to one side.
- People can have automatisms - repetitive purposeless movements like you saw during the video. People may also have repeated rubbing or fiddling of their hands, chewing or lip-smacking movements or walking aimlessly or even running during a seizure.
- It's important to know that if you hold someone back or try to restrain someone when they are confused, they may get agitated because they don't know what is going on.

These seizures may last 1 to 3 minutes. Afterwards they could be tired have a headache or have an upset stomach and they might need to rest for a bit.

These types of seizures can be confused with someone being drunk, abusing substances or aggressive behavior.

Here are two other clips of focal impaired awareness seizures. Look for some of the behaviors I've just described.

Slide 19. Would You Recognize These Seizures? (18:21)

Video on the left has no audio

Video on the right:

[Music]

Man: [tilts head and starts lip smacking]

Cashier: Excuse me sir, come on up and I'll ring you out.

[Music]

Man: [lip smacking and tapping bottle]

Cashier: Come on buddy, we're out of here at five on Sundays.

Slide 20. Generalized Absence Seizures (19:33)

A common type of generalized seizure that you'll see in children is an absence seizure. These affect both sides of the brain at once.

- Generally, there's a pause in their activity and they have a blank stare for a few seconds.
- They are not aware of what is happening during this time.
- You may see brief blinking or chewing movements.
- When the seizure ends, the person returns to full awareness immediately.
- Absence seizures may happen one a time. Of people can have many at once, even up to 50 or 100 a day if they aren't treated properly.
- These seizures are often confused with daydreaming or attention problems.

Look at the video on this page and see if you can pick out the signs of an absence seizure.

Video has no audio

Slide 21. Generalized Tonic Clonic Seizures (20:48)

The seizure type that you may be most concerned about or that you think about when you hear the word epilepsy is a tonic-clonic seizure. This can be a generalized seizure which means it starts and affects the whole brain at once. Or it could start with a focal seizure and then spread to both sides of the brain.

Symptoms during a tonic clonic seizure include

- A hoarse cry as the muscles in the chest become tense or rigid and air is forced out.
- The person loses consciousness.
- They may fall if they're standing.
- There'll be stiffening of the arms and legs – this is called the tonic phase.
- Then rhythmic jerking which is the clonic phase.
- The breathing might be very shallow or irregular.
- You might see drooling but because the person can't swallow right.
- A person may lose control of their bowel or bladder.
- Their skin or nails or lips turn a little bluish and that's just during the period when their breathing is very shallow - if you turn the person on their side and they're their airway is not blocked their color returns to normal.

These seizures usually last just 1 to 3 minutes and they're not medical emergencies. If one of these seizures lasts longer than five minutes, we'd consider it a medical emergency.

After a tonic clonic seizure, the person might be confused, have a headache, feel tired or sore. They may have difficulty talking and they may need to rest for a while it.

Sometimes people may take longer to recover, or it may be hard to tell when a seizure ends, and the recovery starts. Knowing a person's typical seizure is important so you have a baseline.

Slide 22. Seizure First Aid (22:48)

Now after thinking about those common types of seizures, let's think about what you should do to help a person during a seizure or give proper seizure first aid.

Slide 23. Seizure Action Plans (23:01)

Before we talk about seizure first aid, I want to introduce seizure action plans that I'll be referring to throughout the rest of this training. A seizure action or response plan is a document where you can collect a lot of information about the child or youth in one place.

This slide shows an example of one – information collected includes

- The student's name, the parents' names, and emergency contact information.
- Seizure information such as the name and description of their seizures, how long it lasts,
- First aid information should include what parents you usually do for them at home so you can adapt should be done if they have a seizure in the classroom.
- You'll also want to know what's an emergency for that child and what should be done.
- It's important to get information from the family and from the treating provider about whether a rescue therapy is prescribed and how to give it.

Seizure action plans can have a lot of information on it – it's an easy way to inform school personnel what to do, what's specific for each student, and what not to do.

Slide 24. Seizure First Aid Flyer Graphic (24:19)

Let's talk about basic seizure first aid.

The Epilepsy Foundations has simplified first aid to 3 key words - stay / safe / side

These steps can pertain to any type of seizure

1. Regardless of seizure type, stay with the person and start timing the seizure. If the seizure lasts longer than normal for that person, then it's time to call for help.
2. Remain calm so that others around you will be calm too. Also, when the person wakes up they'll see a calm face.
3. Check for medical ID – they may be wearing a bracelet or a necklace. Also look digital ID they might keep emergency medical information on a phone or wearable.
4. Next keep them safe. If they are having a focal seizure, move harmful objects out of the way, guide the person away from harmful objects if they're walking during a seizure. Keep them in an enclosed area and walk with them if possible.
5. If a person has lost consciousness, guide them to the ground. Move objects away from them so they don't hurt themselves. Loosen tight clothing around their neck so they can breathe more easily.

6. Turn them on their side if they are not awake or are unconscious or having shaking movements of their body (these may be called convulsive movements). Turning them on their side allows the tongue to fall off to the side of their mouth. Any saliva can flow from the mouth and not block their breathing.
7. Put something small and soft under their head to keep the head in a neutral position.
8. Don't put anything in their mouth - like a spoon or a pencil or your finger. Remember a person cannot swallow their tongue.
9. Also don't give them water, pills, or food to swallow until they're awake.
10. Do not restrain the person's movements - holding them down won't stop the seizure. There is one exception – if a person is wandering during a seizure and they are headed to a dangerous place (like a street or stairs), call for help and hold them back from danger. In all other situations you don't restrain them – as it may cause the person to become agitated or combative.
11. Most importantly, always stay with them until they're awake and alert. Remember that most seizures end in a few minutes.

Slide 25. 3 Basic Principles of Seizure First Aid (26:44)

To summarize the basic principles of seizure first aid - stay / safe / side and time the seizure.

If a generalized seizure lasts longer than 5 minutes call for help.

Keep in mind that seizures look different and can vary from one person to another so always tailor your care to their seizure action plan.

Slide 26. Any Seizure (27:02)

One example of tailoring is when a seizure occurs in different settings.

You're bound to come across someone who might have a seizure in a wheelchair.

- Ideally keep the student in the wheelchair if possible.
- Please make sure you secure the wheelchair by making sure that the brakes are on.
- Loosen a seatbelt but keep it on if possible, to prevent the student from falling.
- If they're having a focal seizure just stand in front of them and support them to keep them in the chair.
- If they're having a tonic-clonic seizure or a generalized seizure where the body gets stiff and rigid.
- If they're starting to slip out of the chair, call for help and undo the seatbelt. Then you can easily guide them out of the chair onto the ground and turn them on their side to make sure that their breathing is not blocked.
- Again, follow the seizure action plan because there might be some specifics regarding the type of seizure, they have.

Slide 27. Seizure with Loss of Consciousness (28:13)

Another setting in which a student might have a seizure is a school bus or any kind of public transportation.

If they have a seizure with loss of consciousness...

- Alert the bus driver to safely pull over and stop the bus.
- Ideally place the student on their side across the seat of the bus facing away from the seat back.
- If needed you can put them in the main aisle of the bus, subway or a main aisle of whatever you are riding in.
- Stay right with the person, turning them on their side.
- Remind other people to stay in their seats and remain calm.

When the seizure ends, follow the school policy regarding whether you can continue on to the destination.

- If the seizure ends within the usual period of time and the person is returning to their usual state you may be able to just continue on to the destination.
- Some schools might have specific policies on whether or not 9-1-1 should be called.
- It may depend upon the type of seizure that the student had and the length of the seizure.
- Check the student's seizure action plan for this information.

Slide 28. Seizure with Loss of Consciousness (Water) (29:28)

Another setting to be aware of is a seizure with loss of consciousness in water.

Anytime the person has a seizure in water...

- Support the head so both the mouth and the nose are always above the water.
- Remove the student from the water as soon as it can be done safely.
- If the student is not breathing, begin rescue breathing.
- Always make sure to transport the student to the emergency room even if they appear fully recovered.

If a person swallowed water during the seizure they need to be checked out to make sure that there's no other problems developing.

Slide 29. The Postictal (Recovery) Phase (30:07)

The postictal or recovery phase is another part of the seizure that you need to be aware.

Postictal refers to the time immediately after seizure and until the person returns to the usual state of awareness and functioning.

How a person feels and functions during this time will vary depending upon the type of seizure they had and where that seizure occurred in the brain.

- After a focal seizure without change in awareness, the postictal period may be very minimal to none. The person might be fine right away or just need a few minutes to gather their thoughts and return to what they are doing.
- After an absence seizure, a person usually comes to right away though they are not aware of what happened during the seizure.
- If the person was confused or had impaired awareness or a loss of consciousness during the seizure, the postictal phase might be longer lasting minutes or maybe even a few hours. Again, this depends upon the type and length of the seizure.

How can you help...

- Guide the person to a safe place to rest and recover.
- Check to make sure that they're alert and aware.
- Stay with them until another adult arrives if the student is not awake and aware.
- When a seizure happens in a school setting, know when you should call the school nurse and what to do if the person has another seizure or doesn't come to within the time period that is typical for them.
- Also know when the child can return to the classroom. Ideally, after a typical seizure, the child can go back to the classroom as soon as they are ready.
- If some circumstances, the child may need to rest longer or may have trouble learning after a seizure. The school nurse should include this information in the seizure action plan and what to do. For example, can the student rest longer in a private place or do they need to go home? Does the family or medical provider need to be called?

Slide 30. What Not To Do (31:55)

Let's summarize a few of the what NOT to do.

- Do not restrain or forcibly hold the student down. There only are a couple exceptions – for example if the student might be in danger such as a falling down stairs or walking into a street. Otherwise do not restrain a person's movements during a seizure.
- Don't put anything in the student's mouth – they cannot swallow their tongue.
- And do not give water, food, or pills to swallow unless the person is awake and alert.
- If a medicine is prescribed by a person's health care provider to place under a person's tongue or inside the cheek, this can be done as long as the prescriber's instructions are followed regarding when to give it.

Slide 31. Seizure Emergencies (32:25)

It's important to know when a seizure might become a seizure emergency. The emergency situation we are most concerned about is called status epilepticus.

Status epilepticus generally means that:

- There's a continuous state of seizure activity.

- Or that a person has a prolonged seizure.
- A generalized seizure with loss of consciousness is considered prolonged if the seizure lasts over five minutes.
- For a focal seizure where a person's confused or unaware or if t's hard to tell when a seizure ends and postictal confusion begins, the student's health care provider may give a different period of time to define a prolonged seizure.
- If there is no defined time period, generally 10 minutes is considered prolonged if it is not a generalized seizure.
- Status epilepticus may also occur if a person has shorter seizures lasting only a few minutes, but they occur close together and the person doesn't come to or return to their normal state between seizures.

In any of these situations, call 9-1-1 for emergency medical help.

Slide 32. When to Call for Emergency Help (33:45)

There are a few other times when you should call for emergency help.

- If the person is injured or complaining of pain and they might be injured.
- If they're pregnant or sick with another illness.
- If they don't return to the usual state of awareness – this may happen if the person is having continuous seizures. Sometimes it looks like the seizures ends but the person still not respond normally. In this case, the student should be seen in an emergency room to see if they are still having seizures that are not visible.
- Also send them to emergency room if it's the first seizure that they've ever had. The student may need to have a more extensive workup.

Always follow the student's seizure action plan for instructions from their health care provider

Slide 33. Seizure First Aid in Action (34:38)

To review seizure first aid, I'd like you to watch this video and think about the stay / safe / side steps that we just talked about.

[Applause]

[Music]

[Whistle]

Coach: Guys give us some room he's having a seizure, get me some towels! okay stay calm it's gonna be fine, help me get him on his side.

[Music]

Coach:

Alright listen up fellas before we practice, I want to go over a couple of things first I'd like to welcome back Michael.

[Clapping]

Coach:

It's good to have you back. We all know that Michael has epilepsy and he shared his seizure with us in the game. He has something he wants to say.

Michael:

Yeah, um, thank you all for supporting me and thanks to coach for knowing what to do. I'm sorry if my seizures scared you guys it can be scary for me too but what's even more scary is if people didn't know what to do.

Coach:

so today we are going to learn seizure first-aid thanks to the Epilepsy Foundation. We're teammates, right, we take care of one another we count on one another and when anyone with epilepsy has a seizure in front of you, they're your teammate and they're counting on you.

So, first stay with them, okay, stay calm and keep others around you calm and out-of-the-way. Protect him keep him safe it's also important to remember that the person having the seizure should be lying down and that there is nothing harmful in their way.

Turn them on their side and support their head so that they're not banging it and so they don't choke. Never put anything in their mouths and do not hold them down. Time the seizure till the very end, okay, knowing how long the seizure lasts is important information for the doctors to know. If the seizure lasts more than five minutes call 9-1-1.

When you see somebody having a seizure, you're going to feel a little powerless but if you protect them and if you stick with them by their side, you're doing the right thing okay.

[Music]

Coach:

Alright let's practice this.

Boy 1:

Bulldogs on three! One, two, three!

All:

Bulldogs!

This video is available from the Epilepsy Foundation for you to share with your colleagues, with other students in your schools, or anyone that you'd like to teach seizure first aid.

You can obtain this at www.epilepsy.com or visit the Epilepsy Foundation's YouTube channel

Slide 34. Rescue Therapies and Seizure Action Plans (38:11)

In a school setting you may also be asked to give a rescue therapy and you should know where to find this information on a student's seizure action plan.

Slide 35. Rescue Therapies: What are They? (38:27)

Previously, I talked about seizure emergencies and when a person should obtain emergency medical care. Rescue therapies are medicines or other therapies designed to prevent seizure emergencies and the need to send people to emergency rooms.

Rescue therapies are medicines prescribed "as needed" or PRN to stop seizure or abort them or lessen the severity of a seizure. They are not meant to be given after every seizure.

- When to give a rescue therapy is usually individualized, but generally they are intended to stop seizures that are different or longer than usual or happen in a different pattern than usual.
- Rescue therapies must be prescribed by a healthcare provider, but they're designed to be given by non-medical people outside of the hospital.
- It's important that they be given exactly as prescribed and that they do not take the place of a person's usual seizure medicine.

The images on this slide show how rescue therapies can be given.

- The rescue therapy at the top is diazepam rectal gel also known as Diastat AcuDial. It's a form of diazepam (or valium) that can be given by syringe rectally. Some people may not want to have a rectal medication so there are medications being developed that can be given in different ways.
- Medicines are being developed that can be given into the nose. In the middle is a generic atomizer that can be used to give medicine into the nose. When medicines are approved by the FDA, they will be dispensed with their own atomizers or delivery system. One drug – intranasal midazolam – was approved by the FDA and will be available shortly.
- Other drugs may be available soon to give into the nose or between the gum and the cheek.
- Some medicines can be placed under the tongue as well.
- And on the bottom of the slide is a magnet given to people who have VNS therapy (an implanted vagus nerve stimulator). The magnet can be swiped over the generator in the left side of the chest which triggers the device to give an extra burst of stimulation. This is intended to help abort a seizure or lessen the severity of a seizure.

Slide 36. Rescue Therapies (40:38)

If a student has a rescue therapy prescribed, this should be written on their seizure action plan. All school personnel will need to know a number of things before they can give a rescue therapy.

- First, it's important to know the person's typical seizure type and pattern and recognize when a student's seizures are not typical for them.
- In some schools, rescue therapy might only be given by the school nurse.
- But in many states the administration or giving of a rescue therapy can be delegated by the school nurse to a non-medical person.

- Anyone giving a medication should be trained on the need for rescue therapy, who can give it, how to give it and when to call for help. Do you need to call for medical help after giving a rescue therapy, when should a second dose be given, and when can the student go back to class? Rescue therapies are designed to stop seizures so emergency room visits are not needed. If a school policy requires that a student still go to an emergency room, these plans should be discussed with the family and student's treating care provider and written on the seizure action plan. These plans should also include anything else specific for that student.

Slide 37. Write Down What Happens (41:41)

Make sure that you write down what happens if you see a student having a seizure or if you give a rescue therapy.

It's easy to share that information by writing it down on the seizure observation record for that student. Make sure the school nurse knows what happened so she can write it down and communicate with family or the health care provider if needed.

Image on the right

On this slide you'll see a typical seizure observation record from the Epilepsy Foundation. We have other forms too in the toolbox on www.epilepsy.com.

Image on the left

Or on the other side is an example or a screenshot of the Epilepsy Foundation's My Seizure Diary. You might have a student that may use this diary or one of the other electronic seizure diaries. That might be shared with the school nurse so you can easily record data.

Slide 38. Providing Support to Students with Epilepsy (42:23)

Now there are other ways that school personnel can support students with epilepsy. Let's talk for a few minutes about them.

Slide 39. Help Students Identify Seizure Triggers (42:31)

First of all, help students identify if they have any seizure triggers. A seizure trigger might be a situation or an event or something that might make them more likely to have seizures.

Some students might not have any known seizure triggers, or they might have very specific ones.

- Some type of seizures might occur only during sleep or if they're sleep-deprived or shortly after awakening.
- Others might find that seizures happen more often if they're feeling stressed or anxious or if they have some other illness, an infection, or a fever.
- For some students there may not be a specific trigger, but it might be a group of triggers, or if a lot of things happen at once.

- Keep in mind that missed or late medicine is the number one reason for breakthrough seizures.
- On a seizure action plan, ideally the school nurse will find out from the student and from the parents if there are any seizure triggers so that school staff would know what to do if any of these are present.
- The information about the student's triggers can be incorporated into the student's 504 plan or IEP plan.
- For example, if a student is more likely to have seizures in early morning hours, then taking tests might be difficult for them at that time. One of the accommodations might be to offer times later in the day for them to take tests.

Slide 40. Epilepsy: It's More than just Seizures (44:01)

Another important thing to remember is that epilepsy is more than just seizures. That it can affect learning and behavior in a number of ways.

At least 50% of children with epilepsy also have learning difficulties.

- They might have a learning difficulty unassociated with their epilepsy or it might be related to it.
- For example, having seizures can interfere with your ability to remember things, recall things or pay attention.
- It could be side effects of medications that make a person sleepy or tired and hard to remember things or side effects could interfere with attention or memory.
- People with epilepsy have a greater risk of having mood or behavior changes, and that might interfere with learning and behavior or medicines can cause these problems too.
- If a child is worried or depressed or just having epilepsy, they may feel different, they might have low self-esteem or not have confidence in themselves. Those kinds of problems can lead to difficulties with learning and how they perform in school.
- A student can also be absent a lot because of their seizures or because of appointments that they had to go see their medical professionals. Or maybe because they had to be hospitalized because of the seizures.

Keep in mind that epilepsy is more than just seizures. If any of these problems should be noted, they should be considered on their seizure action plans and their educational plans.

Make sure you talk about these issues with the family and with the student's treating provider so that you know how to handle them.

Keep in mind school difficulties are not are seizure or epilepsy related.

Slide 41. Students with Epilepsy (45:50)

There are other ways of providing support to students with epilepsy.

- As I mentioned earlier, stay calm and reassuring as that will help others stay calm too.
- After a seizure, consider that coursework may need to be retaught.

- Make sure you include their seizure action plan in the IEP or 504 plans so everybody's aware of it. Make sure that anyone who comes in contact with the student knows where their seizure action plan is and how to use it.
- Encourage positive peer interaction - social isolation can be a common problem for some students with epilepsy so any way you can facilitate positive interaction is really important.
- Encourage independence and inclusion. Students with epilepsy should be allowed to do everything that students without epilepsy can do.
- Communicate both your concerns and the progress with parents.

Slide 42. Students with Epilepsy (Bullying) (46:47)

Unfortunately bullying is more common for students with epilepsy and for students with other chronic health problems than with students without epilepsy.

- Talk to each student – find out if they've experienced bullying before, what happened and how do they feel?
- Make sure you talk to the other students.
- Make sure that people do not mimic a person having a seizure and that they don't post anything about a student who's having a seizure online. That absolutely should not be tolerated.
- Make sure that you intervene consistently with all students.
- Include epilepsy education into your curriculum. If a student has epilepsy in your classroom, ask them if you can talk to other student about the seizures and what to do. Include them in the education if they would like to be.
- Educate larger classrooms and larger groups, and if a student with epilepsy is participating in and afterschool class, ask if you can share of if they like to share about what to do during a seizure with those students.
- Encourage peer support so that people are supportive of the student rather than bullying them.
- Make sure you involve the student's parents. If the student is being bullied, that can be very stressful, and it might aggravate their seizures. The students' parents should know about that. You also want to find out how they have dealt with it at home and maybe they have tips to share with you as the school personnel.

Slide 43. Epilepsy Foundation School Resources (48:18)

The Epilepsy Foundation is here to help. We have a number of resources to help people in schools.

- There is a *Seizure Training for School Personnel Toolkit*. You could have this information brought to you by one of our local Epilepsy Foundation offices.
- We have *Take Charge Epilepsy Education Series* which are some short videos and programs that can be brought to students that can be viewed online at epilepsy.com. Or someone from an Epilepsy Foundation office can come to your school and deliver this.
- There are other kinds of seizure first aid videos online, as well as a variety of written brochures, videos, or fact sheets that you might find helpful.

- Please visit epilepsy.com to learn more about epilepsy and to visit the online store where you can purchase some of this. Or call your local Epilepsy Foundation office for help.

Slide 44. Where can I Learn More About Epilepsy? (49:14)

To learn more about epilepsy, and how to find your local Epilepsy Foundation by visiting www.epilepsy.com. Or call our 24/7 Helpline at 1-800-332-1000.

Slide 45. Thank You (49:33)

Thank you very much for listening to this training for school personnel.

Thank you very much for all that you do to support students and families with epilepsy.