

KS3 Epilepsy awareness & psychosocial impact lesson

Better futures for young lives with epilepsy youngepilepsy.org.uk





#### KS3 Epilepsy awareness and psychosocial impact lesson - plan

Title: Epilepsy Awareness

**Focus:** The brain, seizures, seizure first aid and the psychosocial impact of epilepsy

**Duration:** 1 hour

Prior learning: This lesson is suitable for pupils who have no existing knowledge of epilepsy. If pupils have already attended the

Young Epilepsy secondary assembly, you can spend more time on the activities.

#### **Learning Outcomes:**

#### AII:

- 1. To describe epilepsy as a medical condition where there is a problem with the electrical messages in the brain.
- 2. To appreciate that seizures can look very different from one another and that someone cannot stop what is happening to them during a seizure.
- 3. To recall at least one thing that they should DO and one thing they DON'T do to help keep someone safe during a tonic clonic seizure.
- 4. To understand that young people with epilepsy can do most activities just like everyone else

#### Most - in addition to the above:

- 1. To recognise the symptoms of absence and tonic clonic seizures.
- 2. To suggest what could happen to someone during a focal seizure affecting a specific part of the brain.
- 3. To recall at least three things that they should DO and two they DON'T do to help keep someone safe during a tonic clonic seizure.
- 4. To describe at least one problem a young person with epilepsy, or their friends and family may have, and be able to suggest at least one thing to help.

#### Some - in addition to the above:

- 1. To understand the difference between generalised and focal seizures.
- 2. To be able to make a link between the functions of the brain and the symptoms of focal seizures.
- 3. To be able to explain why specific actions are taken during seizure first aid for a tonic clonic seizure.
- 4. To understand how epilepsy can impact a young person both emotionally and socially and suggest ways to help.



### Young Epilepsy resources required:

- KS3 Epilepsy awareness and psychosocial impact lesson presentation
- KS3 Epilepsy problem page worksheet
- KS3 Epilepsy problem page answers worksheet

### **Optional Young Epilepsy worksheets:**

- KS3 Blank seizure first aid cartoon
- KS3 Seizure first aid cartoon How to help
- KS3 Seizure first aid cartoon Cut and stick

#### Resources you may need to provide:

- Bean bags (approximately 10)
- Mini white boards

PLEASE NOTE: If you are using the PDF presentation, there will be a slight alteration to the slide numbers in this plan.

Further lesson plans, worksheets and activities are available from the Young Epilepsy website:

http://youngepilepsy.org.uk/what-we-do/helping-schools/resources-for-schools



## **Starter suggestions**

Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
Young Epilepsy  Who has heard of epilepsy?	5	<ul> <li>Tell pupils that today's assembly has been put together by a charity called Young Epilepsy:         <ul> <li>Young Epilepsy work with young people just like you, but also younger children in primary schools and those who go to college and university.</li> <li>They raise awareness of a medical condition called epilepsy. Both children and adults can have epilepsy but Young Epilepsy focus only on childhood epilepsy.</li> </ul> </li> <li>Ask pupils to put their hand up in response to the questions below. To encourage participation, tell pupils you are not going to ask for answers to the questions, you just want a show of hands.         <ul> <li>Had you heard of epilepsy before this lesson?</li> <li>Who thinks they know what epilepsy is?</li> <li>Would you know how to help somebody with epilepsy if they needed it?</li> </ul> </li> <li>Tell pupils that if you'd asked a room full of adults the same three questions, their responses would probably be similar. Lots of people have heard about epilepsy, not many could explain what it is and not many feel confident to help someone.</li> </ul>		Slide 1



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
Epilepsy is	5	<ul> <li>In groups, ask pupils to write and complete the sentence 'Epilepsy is' Alternatively, they could do a spider gram about what they already know.</li> <li>Take feedback from the class. By definition, epilepsy means somebody has recurring seizures; which are a sudden burst of electricity in the brain that can result in a temporary change in the person's behaviour, sensations and/or awareness. However, this will be covered in the main discussion of the lesson so it is best to only share ideas here and avoid getting into a discussion.</li> <li>Groups could be asked to do the same thing at the end of the lesson so that they can see how much their ideas have changed.</li> </ul>	<ul> <li>For inclusion of pupils who find writing, or a discussion such as this, a challenge, put pupils in mixed ability groups and request that only one pupil writes the group's definition down.</li> <li>Alternatively, groups could just discuss their ideas verbally and the teacher could list their ideas on the board and return to it at the end of the lesson.</li> <li>Hints could be given to some groups such as:         What part of the body stops working the way it should in epilepsy? What can happen to someone who has epilepsy? How do you get it?</li> <li>Extension: Complete the following: 'When somebody with epilepsy has a seizure, they' You may need to explain that a seizure is the more scientific term for an epileptic 'fit.'</li> </ul>	



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
What does the brain do?	5-10	Ask pupils to list anything they know about the brain; what it does; how it works? Tell the class that their ideas will be discussed later.	<ul> <li>For inclusion of pupils who find writing, or a discussion such as this, a challenge, put pupils in mixed ability groups and request that only one pupil writes the group's ideas down.</li></ul>	Slides 7-8



## Main activities

Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
Why does everyone need to know about epilepsy?	2	<ul> <li>Use the PowerPoint to explain the reasons why everyone needs to know about epilepsy:</li> <li>Many people including children have epilepsy:  Lots of people have epilepsy in the UK, including both adults and children. In fact, 63,400 children and young people aged 18 and under have epilepsy in the UK – that's more than enough to fill Arsenal's Emirates Stadium!</li> <li>More people have epilepsy than we realise because medication keeps lots of people well and some people may not want to talk about it. We all come into contact with a lot of people throughout our lives (family, friends, work colleagues and even strangers in the street), and so the chances are most people will meet someone who has epilepsy at some point in their life!</li> <li>Epilepsy can take effect suddenly, often without warning. This can be scary for those who are around.</li> </ul>		Slides 2-4
		<ul> <li>warning. This can be scary for those who are around the person with epilepsy and might cause them to panic. However, these feelings soon pass if we know what is going on.</li> <li>We can all help people with epilepsy to stay safe. There are just a few key things that anyone could do</li> </ul>		



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		to help keep someone with epilepsy safe. People with epilepsy will also feel more confident if they know people around them understand how to help!		
Epilepsy and the brain	10	<ul> <li>Tell pupils that in epilepsy, there is a problem in a certain part/organ of the body – do they know what part of the body you are talking about?</li> <li>Establish that it is the brain and show the image on slide 6. Ask why the image of the brain has different coloured parts? The different parts (or lobes) are coloured differently to show that they have different jobs/roles within the body.</li> <li>Ask pupils to list anything they know about the brain; what it does; how it works? If you did this activity as a starter, you can move on to the next step.</li> <li>Take feedback from groups. To ensure all groups feel their ideas have been acknowledged, you could write every group's ideas on the board and place a tick next to an idea each time it is repeated. Alternatively, if you are pushed for time, you could just ask groups to read their ideas out.</li> <li>You could use presentation slide 8 to illustrate some of the key functions of the brain and how it works. Establish that our brains control everything we do, think and feel. Examples of functions are: sight, smell, hearing, taste, touch, movement, emotions and automatic functions of the body like digestion and heart rate.</li> </ul>	<ul> <li>If only a few pupils volunteer an answer for what part of the body causes the problems in epilepsy, tell them that it is the part of the body that controls everything we do, think and feel.</li> <li>If you think electrical messages in the brain will be a difficult concept for your pupils, you could leave this part out and later explain what happens in epilepsy more simply by saying that the brain suddenly becomes disrupted or muddled for a short time.</li> <li>Extension - In Year 7, pupils learn about specialised cells in</li> </ul>	Slides 5-10



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		<ul> <li>Ask how the brain controls so many things; how does it do it so quickly; what does it use? For example, how does our brain tell our hand to move when we wave it?</li> <li>Establish that the brain sends electrical messages around the body to control it using specialised cells called neurones. Slide 10 helps to illustrate this.</li> </ul>	science and some may be able to describe that the brain is made of neurones, which send electrical messages around the brain and body. In order to do this, they are long and branched.	
Key point 1 and 2 (Epilepsy and seizures)	2	<ul> <li>Read out Key point 1: In epilepsy, there is a problem with the electrical messages in the brain.</li> <li>Read out Key point 2: People with epilepsy experience sudden bursts of electricity in their brain - called a seizure. Seizures disrupt the way the brain works for a short time.</li> <li>Expand on this by saying that the disruption in the brain can change the person's behaviour (what they are doing) or what they are feeling.</li> </ul>		
What seizures look like – focal seizures and absence seizures	5	<ul> <li>Ask pupils to share ideas about what it might look like when someone has a seizure.</li> <li>Show slide 14 and explain that there are two groups of seizures – either focal seizures or generalised seizures. Say that the electrical bolt on the diagrams show disruption of electricity. Ask them to look at the</li> </ul>		Slides 13-16



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		diagrams and describe the difference between a focal and generalised seizure.  Explain that in generalised seizures all of the brain becomes disrupted; however, during a focal seizure, only one small part of the brain is disrupted.  Focal seizures:  Tell pupils that you are going to look at what can happen to people during different types of focal seizures.  Show slide 15 and explain that although only one part of the brain becomes disrupted during a focal seizure, any of the jobs this part normally controls (e.g. sight/movement/speech as discussed in the earlier activity) could become disrupted.  Progress the presentation and ask what might happen to someone if the part of their brain that normally controls sight (green area - the occipital lobe) becomes disrupted?  Take ideas. The person could experience temporary blindness, hallucinations or distorted vision. They're not choosing to do these things — it's happening automatically because electrical signals are disrupted during the seizure. It will take a few minutes for the brain to sort the disruption out and once it has, they will return to normal.  The presentation gives further examples of what	o The names of the different areas of the brain are not required for understanding epilepsy at this level and they may confuse some pupils. However, you could read out the names of the different parts of the brain with pupils working at a higher level.	



Key idea/activity	Time (mins)		Guidance	Differentiation	Resources
			happen during different types of focal es. Use the following for support:		
		Parietal (yellow)	This is responsible for sensory (or feeling) information (like touch, temperature, pressure, pain etc.) and orientation. A seizure in this area might result in a feeling like pins and needles or a feeling of warmth or numbness down one side of the body. It could make the person have a strange feeling in their stomach.		
		Temporal lobe	This controls speech, memory, smell, taste and hearing. What might happen to the person's speech during a seizure? Speech may become slurred; the person may be unable to speak or speak in a confused way, making no sense.		
		Frontal lobe (pink)	Amongst many things it controls movements, behaviour and attention. A seizure in this area might make the person walk around in a confused manner, pluck at their clothes or make strange facial expressions.		



Time (mins)	Guidance	Differentiation	Resources
	<ul> <li>Absence seizures:         <ul> <li>Reveal the slide showing the picture of the girl reading.</li> <li>Tell pupils that absences are a type of generalised seizure so the burst of electrical activity disrupts ALL of the brain (shown by the small diagram of the brain).</li> <li>Begin to describe an absence seizure as shown here but stop part way through to model how it looks and then continue as if nothing has happened: during an absence seizure, the person will suddenly freeze and stop what they are doing for a few seconds but will remain standing or sitting as they were before.</li> <li>Tell pupils that absence seizures (if not well controlled by medication) can happen many times in a day so they will miss lots of bits of information unless other people realise this is happening and help them catch up. They often are unaware that a seizure has happened. They might need your help to stay safe because they could stop suddenly in the middle of the road.</li> <li>Establish that absences are not the same as daydreaming, although it may look like it, the person is actually unconscious and will not respond to anything during this time.</li> </ul> </li> </ul>		



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
Key point 3 (Medication)	1	<ul> <li>Read out Key point 3: Most people with epilepsy take medication everyday to help prevent seizures.</li> <li>This medication works well for 75% of people who take it. It is not a cure. It helps to prevent seizures, although they could still have one. Epilepsy medication may make the person feel tired and sick; it may also affect their behaviour by making it hard to concentrate or making them a bit grumpy. These side effects usually diminish once the person has been taking the medication for a while and their body has got used to it.</li> </ul>		Slide 17
Modelling a seizure in the brain	5	<ul> <li>Ask 4-5 pupils to stand in a line to represent parts of the brain and tell them that the bean bags will represent electrical messages.</li> <li>Explain that in people without epilepsy (or in people with epilepsy when they are not having a seizure), electrical messages are sent in a controlled way throughout the brain and body to make things happen when we want them to.</li> <li>Pass 4-5 bean bags, one at a time, down the line from pupil to pupil. The pupil at the end of the line should just collect them all or put them onto a chair/table, which represents the body.</li> <li>Explain that the message could have been about anything the brain controls (e.g. smell, movement and</li> </ul>	o Extension: Ask pupils to remind you what a seizure is – a burst of electrical activity- and then suddenly throw a large number of bean bags all at once along the line (be careful not to hurt pupils!). Ask them why they didn't catch any/many? Establish that sometimes so many messages are sent all at once during a seizure	Slide 18  Bean bags (approx 10)



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		<ul> <li>speech) and needs to get to the correct part of the brain or body.</li> <li>Remind them that epilepsy is a problem with the electrical messages in the brain and that you are now going to demonstrate this with the bean bags. Tell them that they should not pick up any bean bags/messages that they drop.</li> <li>Pass the bean bags along very quickly and throw some directly to the second or third person in the row when they are not looking so that some of the bean bags are dropped on the floor.</li> <li>Ask pupils what happened to the messages and establish that they were sent too fast for the brain to handle. As a result, the messages have not got through and if the message had been about saying something the person might not be able to speak now or may speak in a confused manner. The brain now needs to sort out the disrupted messages and while it does this, it will not be able to work properly. Therefore, the person will only return to normal once the brain has sorted out the disruption.</li> </ul>	that the brain cannot cope and almost freezes. You could liken this to an absence seizure.	
What do seizures look like - tonic clonic seizures	5	<ul> <li>Reveal the slide showing the illustration of a tonic clonic seizure. Like absences, this is a generalised seizure where the burst of electrical activity disrupts ALL of the brain.</li> <li>Has anyone seen someone have his type of seizure? If so, what did it look like? How long did it last?</li> </ul>		Slide 19



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		<ul> <li>Explain that tonic means stiffening and clonic means shaking or convulsions. Firstly, the person becomes unconscious and then the electrical messages are sent out of the brain to all the muscles in the body at once, making them go stiff.</li> <li>Ask pupils to extend one arm up and clench their fist. The muscles go hard because our brains are sending electrical messages to our arm muscles. To stand normally we need a mixture of muscles being relaxed and stiff, but when all the muscles become stiff the person will lose their balance and fall over.</li> <li>Refer to the 'tonic' picture on the slide. It shows that the girl's muscles have stiffened over her entire body.</li> <li>The muscles then begin to relax and contract rhythmically, causing their body to shake. This is called the clonic phase.</li> <li>The person will not feel any pain during the seizure because of the disruption in the brain, but if they injure themselves by falling on hard ground or banging their head, arm or any other part of their body against a hard surface, they will feel it after the seizure has passed.</li> <li>Most tonic clonic seizures last no more than 2-3 minutes.</li> </ul>		



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
Seizure first aid cartoon Key point 4 (First aid)	5	<ul> <li>Read out Key point 4: During a seizure, we need to keep the person safe.</li> <li>Seizure cartoon: <ul> <li>The seizure cartoon on slides 21 and 22 illustrates what people should do to help someone having a tonic clonic seizure.</li> <li>Two versions of the cartoon have been provided; one where the pupils are already numbered, and one where they are not.</li> <li>In groups, ask pupils to discuss what the pupils are doing to help the person having a seizure.</li> <li>Then take feedback from the class, revealing the labels around the cartoon picture.</li> <li>There are also worksheets available that use the seizure cartoon. These are listed in the resources column.</li> </ul> </li> </ul>	<ul> <li>Pupils working at a lower level could be given a mini whiteboard and asked to write down the number of the person who is doing the activity you describe, such as: 'Which number shows the person timing the seizure?'</li> <li>Extension: Pupils working at a higher level could be asked to provide explanations for what the children in the cartoon are doing.</li> </ul>	Slides 20-22.  Optional worksheets:  KS3 Blank seizure first aid cartoon  KS3 Seizure first aid cartoon - How to help  KS3 Seizure first aid cartoon - Cut and stick
Living with epilepsy  Key point 5 (Inclusion)	10	<ul> <li>This activity is a good introduction to the Epilepsy Problems Activity, as it encourages pupils to think about the wider impact epilepsy can have on some young people.</li> <li>Explain to pupils that having epilepsy is not just about seizures. There may be other issues/problems a young person has because of their epilepsy.</li> <li>Show slide 23 and give pupils 2-3 minutes to think about what the pictures have to do with a young person and their epilepsy.</li> </ul>	For pupils working at a lower level, you could provide some structured questions for them to think about such as:  o Is it safe for a young person with epilepsy to go swimming? What could they do when they	Slides 23-24



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		<ul> <li>Take feedback, and emphasise the points below.</li> <li>Safety during activities:         <ul> <li>Sometimes people are so worried about keeping those with epilepsy safe that they think it is better they don't do things in case they get hurt. Sitting out safely in a nice comfy chair all day, every day, might be fun for a while, but the person will soon get bored and frustrated and miss doing things with their friends.</li> <li>Emphasise that ANYBODY doing these activities could have an accident – but we still do them! Young people with epilepsy are no different; they just have to take sensible safety precautions.</li> </ul> </li> <li>Swimming:         <ul> <li>Someone having a seizure whilst swimming could go under the water and even drown. Things they can do to keep safe are: tell the lifeguard about their epilepsy and go with a competent swimmer who knows they have epilepsy.</li> </ul> </li> <li>Concert/lights:         <ul> <li>Pupils will probably say something about flashing lights making people with epilepsy have seizures. HOWEVER, only 5% of people with epilepsy are sensitive to flashing lights (called photosensitive). Even then, flashing lights do not cause seizures</li> </ul> </li> </ul>	go swimming to help stay safe?  Why might parents not want their child with epilepsy to go swimming or be worried about them going to a concert?  Why might a young person with epilepsy be worried about telling their friends about their condition?	



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		(the cause is a problem in the brain) - they make seizures more likely to happen (called a seizure trigger).		
		<ul> <li>Parents:         <ul> <li>Parental concern over safety may result in the young person not being allowed to participate fully in activities or socialise with friends, which can cause conflict in the family.</li> <li>Good communication is key to helping resolve these issues. Once the young person shows they understand their epilepsy and can be trusted to take steps to help keep themselves safe, parents often feel more confident about letting them join in.</li> </ul> </li> </ul>		
		<ul> <li>Friends:         <ul> <li>Young people with epilepsy may worry about telling friends about their epilepsy, how they will react if they see them have a seizure and whether they will know how to help them.</li> <li>Friends may not understand what epilepsy is and have misconceptions (e.g. flashing lights make all people with epilepsy have seizures). This lack of understanding can result in the young person with epilepsy being left out.</li> <li>Again, communication is really important to help resolve these issues.</li> </ul> </li> </ul>		



Key idea/activity	Time (mins)	Guidance	Differentiation	Resources
		Read out Key point 5: Young people with epilepsy can have an active social life. Having good friends who understand about their epilepsy will help them to do this.		
Epilepsy problems	15	<ul> <li>Tell pupils that the next activity looks closer at some of the problems young people with epilepsy and their friends and family may have. Pupils will need to use what they have learned about epilepsy to offer some support and advice.</li> <li>Give each group a copy of the 'KS3 Epilepsy problem page' worksheet.</li> <li>Ask pupils to read the problems and discuss in their group what advice and support they would give for at least one problem.</li> <li>Take feedback from each group as a class, or you could ask 2 groups to join up and share their ideas.</li> <li>You could then give pupils the model answers ('KS3 Epilepsy problem page answers' worksheet) and they can compare them to their own.</li> </ul>	<ul> <li>For pupils working at a lower level, you could tell them what problem to address.</li> <li>Groups could choose how to record their advice, e.g. written prose, a list or spider gram. Alternatively, pupils could just discuss their ideas.</li> </ul>	<ul> <li>Slide 25</li> <li>Worksheets: <ul> <li>KS3 Epilepsy problem page</li> <li>KS3 Epilepsy problem page answers</li> </ul> </li> </ul>



# Suggested plenary activities

Key points	Time (mins)	Activity	Differentiation	Resources
Recapping the key points	5	<ul> <li>Ask pupils if they can remember the key points from the lesson?</li> <li>The pictures should help them but you could prompt their memory with the following hints:</li> <li>1. Hint: What part of the body becomes disrupted in epilepsy/doesn't always work the way it should?? Key point 1: Epilepsy is caused by a problem with the electrical messages in the brain.</li> <li>2. Hint: What can happen to the electricity in the brain; what is this called? Key point 2: People with epilepsy experience sudden bursts of electricity in the brain - called a seizure. Seizures disrupt the way the brain works for a short time.</li> <li>3. Hint: How do you treat epilepsy? Key point 3: Most people with epilepsy take medication everyday to help prevent seizures.</li> <li>4. Hint: What is our key job when someone has a seizure? Key point 4: During a seizure, we need to keep the person safe.</li> </ul>	<ul> <li>To help pupils, use the hints provided.</li> <li>The images can be used as visual clues to prompt pupil's memory.</li> </ul>	Slides 26-28



Key points	Time (mins)	Activity	Differentiation	Resources
		5. Hint: Can young people with epilepsy have a normal social life? What can help achieve this? Key point 5: Young people with epilepsy can have an active social life. Having good friends who understand about their epilepsy will help them to do this.		
Revisiting the 'Epilepsy is?' starter	5	<ul> <li>In groups, ask pupils to complete the sentence 'Epilepsy is'</li> <li>You do not need to have done this activity as the starter in order to use it as the plenary. However, it can be interesting to compare the before and after definitions. Ask some groups to feedback their ideas.</li> </ul>	<ul> <li>For inclusion of pupils who find writing, or a discussion such as this a challenge, put pupils in mixed ability groups and request that only one pupil writes the group's definition down. Alternatively, groups could just discuss their ideas verbally and the teacher could list their ideas on the board.</li> <li>Extension: Pupils could do a spider gram or a list of facts they have learned about epilepsy.</li> </ul>	
Splat – Keyword and ideas game	5	<ul> <li>Display key words and phrases from the lesson randomly on the board.</li> <li>In this activity, 2 pupils stand either side of the whiteboard</li> </ul>	This activity enables     you to assess the     learning of the pupils at	



K AV hainte	ime nins)	Activity	Differentiation	Resources
		with their backs to it so that they are facing the class.  Pupils sitting down must think of questions about the lesson that fit ONE of the answers on the board. Once pupils have thought of appropriate questions, they can put up their hands and the teacher selects one of them to ask the question (e.g. name one thing you should do when someone has a seizure?)  Once the question has been asked, the 2 pupils at the board can turn around and look at the key words and phrases. It is then a competition to see who is the quickest at finding the word and touching it with their hand (i.e. the fastest to 'splat' it).  The pupil who is the quickest stays by the board, whilst the other swaps places with the pupil who asked the question.  Another question can then be asked. This can continue for as long as you want it to.  Splat suggested key words: Brain, Seizure, Neurone, Electricity, Disrupted, Absence, Focal, Tonic clonic, Medication, Time the seizure, Restrict their movements, After 5 minutes, Dai Greene, Confused speech, Stiffen, Shake, Lifeguard, Photosensitive.	the board and of the pupils formulating and asking the questions (they need to be able to think of a question to which they know the answer!) It is an openended activity and pupils will therefore ask questions that reflect the level and depth of their understanding.  • Extension: Ask pupils to think of the keywords and phrases themselves.	