Epilepsy: safety in sport

In this leaflet Annemieke van der Pauw, a nurse in Manchester, talks about how people with epilepsy can stay safe when doing sport.

It’s important for everyone to get enough exercise.

Regular exercise enhances general well-being by:

• improving physical fitness
• lifting mood
• reducing stress and aiding relaxation
• providing social opportunities

Epilepsy affects people differently. Choices about taking part in a particular sport or activity should be made on an individual basis, with safety precautions tailored to meet individual needs. People whose seizures are completely controlled are unlikely to have to take the same precautions as those who continue to have seizures.

In choosing an activity, it is important to put in place appropriate safety precautions, but at the same time to avoid imposing any unnecessary restrictions.

Decisions about whether to take part in a particular activity must always involve the person who is participating and perhaps also their family or carer, and should be based on:

• the risks the activity poses to anyone, whether or not they have epilepsy
• seizure type and degree of seizure control
• seizure triggers, e.g. noise or reaction to stress
• whether there is a useful warning (aura) before seizures
• any side effects of anti-epileptic drugs, e.g. sleepiness, poor balance
• the risks to the person with epilepsy and others if a seizure occurs while participating

If your seizures are not well controlled it is best to avoid sports in which loss of consciousness or altered awareness could put you or others at risk, and also sports that have a high risk of head injury.

When participating in any sport be aware that:

• getting too hot, too cold, over-tired or stressed can trigger seizures
• going for long periods without food or drink can trigger seizures
• it’s wise to take time to warm up before strenuous exercise and cool down afterwards
• it’s important for your own and others’ safety to tell the instructor, supervisor or referee that you have epilepsy
• it’s a good idea to take a companion with you who knows what your seizures are like and what to do if one occurs. This is particularly important if you want to take part in water sports
• for some sports it is advisable to have appropriate insurance. Governing bodies will be able to advise on this

If you haven’t exercised for a while, speak to your doctor before taking up a sport. People with epilepsy may be eligible for free coaching or supervision at your local leisure centre via the GP Exercise Referral Scheme. Contact your GP practice for details.
Advice for specific sports

<table>
<thead>
<tr>
<th>Sport</th>
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<tbody>
<tr>
<td><strong>Boxing</strong></td>
<td>Due to the high risk of head injury, boxing is not recommended for people with epilepsy. The British Boxing Board of Control will not grant a licence to anyone who has a diagnosis of epilepsy.</td>
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<td><strong>Bungee jumping</strong></td>
<td>Sudden changes in air pressure occur when bungee jumping. This may affect oxygen levels in the brain and may trigger a seizure.</td>
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<td><strong>Climbing</strong></td>
<td>If your seizures are well controlled, climb with companions who are aware of your epilepsy and know how to manage seizures. The effects of reduced oxygen levels at high altitude may trigger seizures. If your seizures are poorly controlled it may still be possible to try climbing on an indoor wall under the supervision of a qualified instructor who knows how to manage seizures.</td>
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| **Cycling**            | As cycling in heavy traffic can be dangerous for anyone:  
                        | • Stick to side roads and bike lanes as much as possible  
                        | • Ensure brakes, lights and bells are working  
                        | • Wear reflective clothing  
                        | • A helmet may reduce the risk of head injury in an accident  
                        | A tandem, trike or adapted bike may be an option for adults and children with unpredictable seizures. |
| **Golf**               | Take a companion and consider carrying a mobile phone. |
| **Gymnastics, trampolining, at the gym** | These are popular activities, but using equipment unsupervised may be risky if you have unpredictable seizures. Let the instructor know that you have epilepsy and what to do in the event of a seizure. |
| **Hang-gliding and paragliding** | This may not be suitable for people with active epilepsy. Pilots and passengers of hang-giders and paragliders need to be able to maintain safe control of the glider at all times to avoid posing risks to themselves or others. However, Flyability (www.flyability.org.uk), the Disability Initiative of the British Hang Gliding & Paragliding Association, can offer individual risk assessments and have in the past provided tandem flights to people with epilepsy. |
| **Martial arts**       | Although sports involving a high risk of head injury are best avoided, participation in lower-risk martial arts need not necessarily be ruled out. A wide range of martial arts can be studied – contact the governing body of the relevant activity for information. |
| **Rambling and hiking**| If your seizures are not well controlled it's safer to go with a group that includes someone who knows how to manage seizures. Follow standard safety guidelines:  
                        | • Tell someone where you are going, when you expect to get there and give them details of your route  
                        | • Ensure you have a good map, a compass (and you know how to use it), suitable clothing and footwear and a torch  
                        | • Take a mobile phone but be aware that you may be out of range of the phone network  
                        | • Have a plan in place for getting help in an emergency.  
<pre><code>                    | The Ramblers’ Association (www.ramblers.org.uk/) can provide more information about safety issues. |
</code></pre>
<p>| <strong>Riding</strong>             | Everyone should wear a helmet when horse riding. It’s best to stay away from traffic and have a companion with you. If seizures are frequent and unpredictable, riding may still be an option. Contact Riding for the Disabled (<a href="http://www.riding-for-disabled.org.uk/">www.riding-for-disabled.org.uk/</a>) on 0845 658 1082 for information. |</p>
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<td><strong>Racquet sports</strong></td>
<td>Be wary of overheating and dehydration.</td>
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<td><strong>Running</strong></td>
<td>Long distance running can put extra strain on the heart and circulation. It should be undertaken only by those who have trained regularly and are aware of the need to warm up and cool down appropriately. Take plenty of fluids to avoid dehydration. It might be wise to have someone with you during the run and especially during the cool-down period.</td>
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<td><strong>Skateboarding and rollerblading</strong></td>
<td>Learn on a smooth, flat surface. Ensure that equipment is well maintained and that you know how to use it correctly. Stay away from traffic and wear appropriate protective clothing. Avoid high ramps in skateboard parks if your seizures are poorly controlled or unpredictable.</td>
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<td><strong>Skiing</strong></td>
<td>Downhill skiing may pose additional risks to people with active epilepsy. Cross-country skiing with a companion may be a safer option.</td>
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<td><strong>Skydiving and parachuting</strong></td>
<td>“Tandem jumping” with a partner may be an option. Contact Flyability (<a href="http://www.flyability.org.uk">www.flyability.org.uk</a>) for more information.</td>
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<td><strong>Team sports</strong></td>
<td>You should be able to take part in sports such as rugby, football and hockey provided safety measures are taken, e.g. wearing head protection. However, if your epilepsy was caused by a head injury, these sports may be best avoided.</td>
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<td><strong>Yoga</strong></td>
<td>Taking part in yoga is unlikely to cause problems but make sure your teacher knows how to manage seizures. Contact the British Wheel of Yoga (<a href="http://www.bwy.org.uk">www.bwy.org.uk</a>) for details of teachers in your area.</td>
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### Advice for water sports

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<td><strong>Canoeing, kayaking, white water rafting</strong></td>
<td>Gently flowing water poses fewer risks than fast flowing rivers with rapids and waterfalls. An open canoe is easier to get out of, and therefore may be safer than a kayak. It is advisable to wear protective headgear and always have a friend or guide with you.</td>
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<td><strong>Fishing</strong></td>
<td>If your seizures are poorly controlled always take a companion and consider wearing a life jacket. It is safer to fish from the water’s edge than from a boat or a pier.</td>
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<td><strong>Sailing, surfing, windsurfing, water skiing, snorkelling</strong></td>
<td>Always take a companion, wear a buoyancy aid and ensure there is appropriate supervision. Contact the governing body of the relevant activity for more information.</td>
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| **Scuba diving**                            | This is not generally recommended for people with epilepsy even if their seizures are well controlled because:  
• a major seizure underwater can lead to drowning  
• recognising and managing a seizure underwater and getting emergency help is likely to be more difficult at sea than on land  
• the possibility of a seizure poses risks to other divers  
• it is possible that people taking AEDs may be more susceptible to decompression sickness (“the bends”), a painful and potentially fatal condition  
• raised oxygen pressure in compressed air may trigger seizures  
The British Sub-Aqua Club (https://www.bsac.com) suggests people should be seizure free and medication-free for five years (if seizures have only occurred during sleep, this can be reduced to three years free from seizures and medication) before they consider scuba diving. |
### What to do if someone has a seizure in the water

- **Support them from behind, holding their head above the water**
- **If possible, move into shallow water**
- **Don’t try to restrict their movements or place anything in their mouth**
- **Once uncontrolled movements have stopped, move the person out of the water and place them in the recovery position**
- **Take the usual resuscitation measures and get medical help immediately – water may have been inhaled and this can cause lung infection or suffocation**

Not all seizures involve loss of consciousness or convulsions. During an absence seizure the person may appear to be daydreaming, and in focal seizures they may make repetitive movements and awareness may be altered. Keep the person’s head above water, and when they recover suggest getting out of the water. They may not realise what has happened and may feel groggy. Take the usual resuscitation measures if necessary and get medical help in case water has been inhaled.

For more information see our leaflet entitled ‘What to do when someone has a seizure’.

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**Swimming**

Swimming is a popular and enjoyable form of exercise. It’s particularly important that children with epilepsy are included in swimming lessons. Adequate supervision is essential but should be as discreet as possible.

- **Learn to swim in a safe environment**
- **Take a companion with you**
- **Tell the lifeguard that you have epilepsy and ensure he or she knows what to do if you have a seizure**
- **If there is no qualified life-saver present, don’t swim any deeper than your companion’s shoulder height and stay within arm’s reach**
- **Make sure your companion knows what your seizures are like and what to do if a seizure occurs in water – practise rescue procedures with your companion to build your confidence and theirs (see the guidelines below)**
- **Don’t take unnecessary risks – think twice about swimming in the sea, lakes or in very cold water; avoid overcrowded places where it would be difficult for you to be seen, and don’t swim if you’re unwell**