

EPILEPSY: LEISURE AND PLEASURE – SAFETY ISSUES

Most people enjoy an active social life and taking part in leisure activities can benefit wellbeing. However, when socialising, exposure to stress factors such as alcohol and other recreational drugs, excessive noise, heat and dehydration can pose problems for anyone, particularly people with epilepsy. This leaflet aims to support people with epilepsy to make informed choices about leisure activities by identifying areas of risk.

ACTIVITIES

Cinema and theatre

Going to the cinema and the theatre is safe for most people with epilepsy. Films and stage productions with special effects (including laser, strobe effect and flashing lights) could potentially trigger seizures in people with photosensitive epilepsy. If your seizures are unpredictable or severe you may wish to think carefully about where to sit. Avoid “the gods”, stone steps, etc., and consider what access and assistance may be available should a seizure occur.

Discos

Ordinary flashing lights in discos and clubs do not generally trigger seizures but they can be uncomfortable. Strobe lights that flash at a rate of 5-30 flashes per second can trigger seizures. If you are affected, turn away and cover one eye with your hand until the lights stop flashing. Be aware of other seizure triggers to which you may be exposed, including dehydration, excess noise and heat, late nights, alcohol and recreational drugs.

Theme parks, fairgrounds, carnival rides

Be aware that fast moving, jerking or spinning rides may disorientate you.

ALCOHOL, STIMULANTS, RECREATIONAL DRUGS

The following does not describe all stimulants and recreational drugs but is limited to those known to have possible adverse effects of people with epilepsy. Other drugs and substances not listed here may also have adverse effects on epilepsy and seizures.

Alcohol

There are no hard and fast rules about whether it is safe for people with epilepsy to drink alcohol, but there are a number of factors to take into consideration:

- Alcohol makes AEDs less effective.
- Alcohol can reduce seizure threshold and increase susceptibility to seizures.
- Binge drinking can cause seizures in anyone, whether or not they have epilepsy, during the hangover period.
- Heavy drinking can lead to late nights, disturbed sleep and missed medication, all of which are recognised seizure triggers.

Current recommended guidelines for maximum alcohol intake are:

MEN: up to 3 units per day WOMEN: up to 2 units per day

1 unit of alcohol = ½ pint of ordinary strength beer, lager or cider
or
1 small glass (125ml) of wine
or
1 single pub measure of spirits (1/6th of a gill or 25ml)

Some people with epilepsy find they can enjoy a couple of drinks without disturbing seizure control; others find that even a small amount of alcohol can trigger seizures. It's important for individuals to take into account their epilepsy and their general health and find a safe limit of alcohol consumption.

Caffeine

In its pure form, caffeine can reduce seizure threshold, but there is no evidence to suggest that drinking reasonable amounts of tea or coffee can trigger seizures. However some people report improved seizure control when they reduce their caffeine consumption.

Drinking too much of *any* fluid may cause water retention which in turn can upset the fluid balance of the body (sometimes called "water intoxication"). This may trigger seizures.

Tobacco

There is no evidence to link smoking with seizures. If you want to stop smoking seek advice from your doctor or community pharmacist before buying any nicotine products. Some nicotine preparations used to help people stop smoking can cause convulsions.

Solvents (glue, paint, aerosols, petrol)

Misuse of solvents can cause brain damage which in turn can lead to epilepsy and seizures. It is possible that sniffing solvents over a long period of time could make epilepsy worse.

Recreational drugs

- **Amphetamines** can cause seizures when taken in high doses and/or along with other substances. Amphetamines are used as a stimulant to stay awake and active for long periods. Resulting lack of sleep can trigger seizures in some people.
- **Barbiturates and tranquilisers** in high doses can cause convulsions.
- **Cocaine** can trigger seizures in anyone, whether they have epilepsy or not, by reducing the seizure threshold.
- **Ecstasy** tablets can be made up of many different substances so it is difficult to know if a person with epilepsy could experience a seizure as this depends on the contents and purity of a tablet itself. There is evidence linking ecstasy with seizures, perhaps as a result of taking it with other illicit substances or by becoming dehydrated. Drinking too much water, too, quickly causes "water intoxication" which can trigger seizures.

- **Heroin** has been linked with seizures, which can be caused by the drug itself, or by using it in combination with alcohol, illicit drugs or other substances, or as a result of infection from dirty needles
- **Marijuana** affects people differently and there is little scientific evidence to suggest that it has any effect on seizures. It is difficult to reach any definite conclusions because varying strengths and purities are available and people use different amounts. However, some people report improved seizure control, while others have more seizures.

Seizures are caused by an imbalance in the chemical activity of the brain. AEDs work to restore that balance. Recreational drugs also affect the brain's chemical balance. Mixing AEDs with illicit substances can have an unpredictable effect on brain activity and is potentially very dangerous.

Use of any of the drugs mentioned above can lead to lifestyle changes that may trigger seizures, e.g., missed meals, lack of sleep, forgetting to take medication.

Use of recreational drugs can have serious long-term, health and social implications.

For more information about alcohol, recreational drugs and solvents see www.talktofrank.com/ or call the National Drugs Helpline on 0800 776600.

ELECTRONIC EQUIPMENT

TV, video games, computers and mobile phones

About 5% of people with epilepsy have photosensitive epilepsy, which means that their seizures can be triggered by flickering lights or patterns. If you have photosensitive epilepsy, you can take precautions to reduce the risk of having a seizure while watching TV or playing video games. The guidelines below are particularly important in relation to children, who should be supervised while watching TV, playing video games, or using computers.

Watching TV

- Make sure the room is well-lit.
- Place a small subdued light on top of or behind the TV to balance the brightness of the screen.
- High frequency screens (e.g., 100Hz) are less likely to trigger seizures. Flatscreen or LCD (liquid crystal display) units don't flicker at all..
- Sit well away from the screen (about 8 feet or 2.5 metres), and level with the screen rather than below it.
- Change channels with a remote control or cover one eye to reduce flicker if you have to approach the TV while it's switched on.
- Take a five-minute break away from the screen every 30 minutes.

Playing video games on a TV screen

- Follow the guidelines above for watching TV
- Read and follow the instructions that accompany the game
- Don't play when you're tired

- Take a 5-minute break away from the screen every 15 minutes
- Switch the game off immediately if you feel uncomfortable in any way – dizzy, blurred vision, muscles start to twitch.

Using computers

- Computer screens have a high flicker frequency and are generally safe for people with epilepsy.
- LCD screens (used in laptop computers) don't flicker and shouldn't present any problems.
- The risk of a seizure occurring while using a screen depends on the material being viewed. Some software, especially games and cartoons, can contain flickering images or patterns that may trigger seizures. Software that includes images of significant intensity and frequency may trigger a seizure.
- Reading from the screen for a long time can cause tiredness and this could cause seizures in some people. Use an anti-glare screen to reduce fatigue and discomfort and take frequent regular breaks away from the screen – use a timer as it's easy to lose track of time.
- Move away from the screen for five minutes every 15 minutes.

For more information on photosensitivity, see leaflet thirteen in this series: '**Epilepsy and photosensitivity**'

Mobile phones

Research into the effects on health of using mobile phones is inconclusive. So until there is more evidence, it is sensible for everyone, whether they have epilepsy or not, to restrict their mobile phone use to short, essential calls only. In 2001, Dr Tim Betts of the Birmingham University Seizure Clinic recommended that:

- People with epilepsy who use mobile phones often should carefully monitor their seizure frequency.
- Mobile phones should be kept away from vagus nerve stimulation devices.
- Children with epilepsy should be discouraged from using mobile phones.

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