

Photosensitive factsheet epilepsy



“Less than 6%
of people with
epilepsy are
photosensitive”

epilepsy scotland
Scotland's voice for epilepsy

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Photosensitive epilepsy

What is epilepsy?

Forty thousand people in Scotland have epilepsy. This is one in 130 people. It is the most common serious brain (neurological) condition. Anyone can develop epilepsy at any age. However, it is most common in childhood, the teenage years and later life.

Epilepsy is described as the tendency to have recurrent seizures which start in the brain. Seizures used to be known as 'fits'. They are caused by disturbances in the brain's normal activity. Some people may have one or two seizures during their life. These could be due to a high temperature or a head injury. It does not necessarily mean they have epilepsy.

Photosensitive epilepsy

Photosensitive epilepsy is a type of epilepsy where seizures are triggered by flashing or flickering lights. The lights are usually of a certain intensity or pattern, such as stripes. The television is the most common source of light patterns that can trigger seizures in photosensitive people. People with different types of seizures could be photosensitive.

Flashing lights, TV and computer games do not make a person photosensitive or cause epilepsy.



They can trigger seizures in people with epilepsy who are sensitive to these factors. These people have photosensitive epilepsy.

Some people with photosensitive epilepsy have seizures only when exposed to flashing or flickering light sources. Others may find that only some of their seizures are due to photosensitivity.

Who has it?

Photosensitive epilepsy is a very rare condition. Less than 6% of people with epilepsy have seizures triggered by flickering lights or patterns.

Photosensitive epilepsy most commonly affects children. It usually starts between the ages of 6 and 18 years. Girls are affected more than boys and photosensitive epilepsy is thought to have a genetic factor.

Diagnosing photosensitive epilepsy

A diagnosis of photosensitive epilepsy can only be made by carrying out an EEG recording using flickering light or pattern stimulation. If you are uncertain whether or not you, or your child, has photosensitive epilepsy, you should seek advice from your doctor.

Light sources

Both natural and artificial light sources can trigger seizures in people with photosensitive epilepsy. Natural light sources can include sunlight shining off water (or wet surfaces), through the leaves of trees, or through railings. Artificial light sources can include television screens, strobe lights and video games.

Reducing the risk of having a seizure

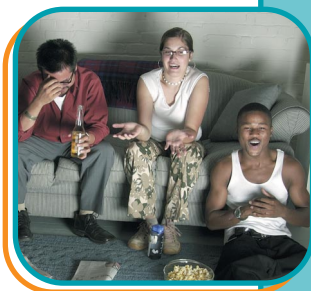
If you have photosensitive epilepsy and you unexpectedly come across flickering lights, such as sunlight through trees or a strobe light is suddenly switched on, covering one eye with your hand can help. There are a number of other ways you can reduce the risk of having a seizure:

Television

Television is the most commonly reported trigger of seizures in photosensitive people and your distance from the TV screen is the most important factor. The closer you are to the TV, the more the screen fills your entire field of vision and the greater the effect on the back of the eye.

A few simple precautions can be taken:

- Sit away from the TV at either a distance of around 3 metres, or 4 times the size of the screen
- Sit level with, not below, the TV screen
- Turn down the brightness of your screen and play around with the lighting of the room to see what suits you best
- Use a remote control to change channels and switch the TV on and off
- If you do need to operate the controls of the TV, put a hand over one eye to lessen any flicker. Closing your eye may still allow the light to pass through your eyelid
- Do not watch the TV screen when fast-forwarding or re-winding a video tape
- A small TV (14 inches or smaller) is preferable to a large one. Alternatively, a 100 Hz TV or one with a liquid crystal display screen does not flicker at all.



Video and computer games

Current medical opinion is that video and computer games do not trigger seizures unless an underlying tendency to have seizures is already there. It is possible that for some people with epilepsy sustained and intense concentration whilst playing games may generate stress which in turn triggers a seizure. It is worth taking regular breaks and avoiding playing games if you are feeling tired. If you have photosensitive epilepsy, particular games featuring patterns of flashing lights may sometimes trigger seizures. Computer games may be safer than video games as using a computer monitor/screen is better than using a TV screen. If a TV screen must be used, adopt the safety measures outlined.



Computer screens (Visual Display Units - VDUs)

There is no evidence to suggest that computers or VDUs actually cause epilepsy. Epileptic seizures may be provoked in a very small number of people who are already sensitive to the flicker-effect of the screen. However, computer screens rarely flash at a rate the eye will detect. If possible, set the reflex rate as high as you can - 75 cycles per second or more, is suggested. Although more expensive, Liquid Crystal Display screens do not flash at all and are usually found on lap-top computers.

It is worth bearing in mind, however, that sustained and intense concentration when using a computer may be stressful or cause tiredness and thereby trigger a seizure in some people with epilepsy. Taking short but regular breaks from your computer is advised.

Nightclubs

Most young people with epilepsy are not photosensitive and can enjoy nightclubs or discos. For those who do have photosensitive epilepsy, strobe lights can trigger seizures. This depends on the speed at which the lights are flashing. The most common flash rates that produce seizures are between 12 and 24 flashes per second. Not all nightclubs have strobe lights, so it is worth checking this out.



Remember

A lot of time is spent at work or at home watching TV, playing video games or using computers. If a seizure occurs in one of these circumstances it could be a chance event - it does not necessarily mean that the TV or computer has triggered the seizure.

There is a danger that people with epilepsy who are not photosensitive will falsely assume that they are and quite unnecessarily restrict their lifestyles. If you are concerned, speak to your doctor who will be able to clarify whether or not you have photosensitive epilepsy.

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