

Samsung warns of epilepsy and stroke risk for some viewers and says 3D TV is not for you if you've been drinking

By Tim Locke

3D TV is claimed to be the next big thing in home entertainment, but concerns are being raised about health risks for some people watching the new sets.

There's a buzz about 3D. 3D films are already proving popular, with Avatar breaking box office records, while Sky is showing premier league football in 3D in some pubs before the 3D service launches for the home viewer.

One TV manufacturer has issued warnings that the 3D images could trigger epileptic seizures or strokes and some doctors agree there are significant risks. However, not everyone agrees.

So, is 3D TV a real danger, or just like our mothers telling us that watching too much old style TV would give us 'square eyes'?

3D TV technology

Different systems use different technologies to give the illusion of 3D images on a TV screen. This usually involves wearing some kind of special glasses to make each eye see a different image, leaving the brain to translate this into 3D.

Some of the glasses are like sunglasses with special filters; others are connected wirelessly to the TV with special electronic shutters built in to block and unblock what each eye sees very fast.

The manufacturer

Samsung has issued a news release through its Australian office warning that its active 3D glasses can be affected by fluorescent lighting and sunlight - and the resulting flickering effect can cause photosensitive seizures and other health risks.

The product warning says, "Some viewers may experience an epileptic seizure or stroke when exposed to certain flashing images or lights contained in certain television pictures or video games. If you or any of your family has a history of epilepsy or stroke, please consult with a medical specialist before using the 3D function."

It also says viewers should seek medical attention if they suffer altered vision, light-headedness, dizziness, and involuntary movements such as eye or muscle twitching, confusion, nausea, loss of awareness, convulsions, cramps and disorientation.

Samsung advises parents to monitor children and teenagers who it says may be more likely to experience these symptoms than adults.

The warnings continue, and sound like bad news for couch potatoes: “Viewing in 3D mode may also cause motion sickness, perceptual after effects, disorientation, eye strain, and decreased postural stability. It is recommended that users take frequent breaks to lessen the likelihood of these effects.

“We do not recommend watching 3D if you are in bad physical condition, need sleep or have been drinking alcohol.”

It advises viewers not to sit too close to the screen and warns against placing 3D TVs near stairs or balconies as “Viewing in 3D mode may cause disorientation for some viewers.”

Expert view

Ophthalmologist Dr Mark Fromer, from Lenox Hill Hospital in New York is worried about what the 3D technology forces our eyes to do. He tells us by email: “Three dimensional TV may cause eye fatigue and headaches for those individuals with a lazy eye or muscle imbalance. The three dimension technology forces the eyes to adjust at both near and far at the same time which is an unnatural state for the eyes.

“Normally to see objects in 3 D each eye sees the image at slightly different angles. This is not the way the 3 D image is created for the big screen and can lead to increased fatigue, head ache and blurred vision. Individuals with minor muscle imbalances or a lazy eye are more likely than the average person to develop these symptoms.

“This probably accounts for 5 to 10% of the population who will not be able to benefit from a 3D movie and may experience these symptoms to a greater degree.”

Dr. Fromer warns that some people would be wasting their money on an expensive 3D TV. “Everyone will experience some minor vision fatigue after a three hour 3 D movie. People with a muscle imbalance or one poorly seeing eye will not see three D images.”