

RISK TO VIEWERS WITH PHOTSENSITIVE EPILEPSY

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The ITC Guidelines (annex 8) were developed between 1993 and 2001 in a series of Guidance Notes. The final version in 2001 was a consensus statement of a Committee set up by the ITC consisting of three medical experts: Prof G F A Harding, Prof C Binnie, and Prof A Wilkins, members of the ITC staff, and representatives of the broadcasting industry.

These Guidelines have been most effective in reducing the problem to individuals who may be photosensitive. It should be realised that until they have their first seizure many individuals do not know that they are photosensitive and indeed from studies of the Pokemon incident in Japan it is apparent that only 24 per cent of affected viewers had a previous history of epilepsy or photosensitivity.

Experience of the British Epilepsy Association has shown a marked reduction in complaints since the incorporation of the latest guidelines. Equally, studies in Japan by Y Takahashi and colleagues have shown a marked reduction in referrals for photosensitive epilepsy since the incorporation of the Japanese Guidelines which closely approximate those of the ITC. These findings were reported at an Epilepsy meeting in Sendai, Japan in April 2003 and will be presented at an Epilepsy Foundation of America workshop at the end of August 2004 which will include members of the US Government regulatory authorities with a view to establishing US guidelines for the prevention of photosensitive seizures from televised broadcast material.

The International Telecommunications Union has now drafted guidelines to restrict flashing images on an international basis.

The Guidelines on potentially harmful flashes (Ofcom) Section 3 of Annex 8 and also the section on rapidly changing image sequences have been adopted by the ITU unequivocally.

However, Section 5 on potentially harmful regular patterns has not been adopted. In the UK it has been the experience of the ITC and the British Epilepsy Association that relatively few complaints are made by viewers with regard to repetitive patterns, yet the television broadcast industry appear to have more difficulty with this regulation than with any of the others. The previous ITC regulations restricted patterns with between 10 and 40 pairs of bars but the guidance note issued in 2001 strengthened the restriction to five pairs of bars and above. Unfortunately this sequence appears to occur in a number of natural environments (and example being the 'Old Glory' flag of the USA). A paper is being prepared for publication by Professor Arnold Wilkins, Dr John Emmett and myself which recommends changes in these restrictions. This paper is based on experimental studies of our patients and we propose that the same low level of risk could be achieved with reduced restrictions. In summary, this would be that if the pairs of bars change direction, oscillate, or flash or reverse the current restriction of five light/dark pairs of bars would apply. However, if the stripes are stationary the screen should show no more than eight pairs of bars. In addition, if all the stripes obviously move smoothly across into or out of the screen then the screen should show no more than twelve pairs of bars. Also, the stimulus has to be present for at least 0.5 of a second to contravene the Guidelines.

I am sure that the application of this restriction would ease the problems of the broadcast industry in showing natural phenomena such as railings, balconies, colonnades, and venetian blinds.

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