



Strobe Lighting Safety

Subject: Safety Precautions When Using Strobes		
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Introduction

Flicker sensitivity is a rare condition in which flickering lights, under certain conditions, can trigger a full convulsive epileptic seizure. Although it is known that strobe lighting can present a health and safety risk to flicker-sensitive people, there is no legislation that specifically covers the use of strobe lighting in the entertainment industry. It is therefore our recommendation that you consider strobe lighting in the greater context of Occupational Health and Safety and include it in your risk assessment process. This document provides guidelines to help you manage the risk presented by strobe lighting. Similar guidelines may also be found in industry or workplace Codes of Practice in places where such codes have been adopted.

Applicability

These guidelines are applicable to conventional xenon tube type strobe lights but it should be noted that any luminaires that are used to produce strong rapid flashes of light carry the same risks as conventional strobes. In particular, the use of the strobe function available on many high power intelligent luminaires should be considered as having risk factors comparable to conventional strobes.

Guidelines

- Carefully consider the use of strobes, and use a safer alternative effect if possible.
- Always abide by Codes of Practice applicable to your workplace.
- Strobes operate at high internal voltages so make sure the strobe has a current electrical safety test tag.
- Whenever strobes are to be used, display advisory notices at the point of ticket sales, on tickets if possible, in the programme, and at the entrance(s) to the auditorium or venue.
- Always keep the flash rate below 5 flashes per second. It is estimated that below this rate only 5% of flicker-sensitive people will be at risk of an attack.
- When multiple strobes are in use, ensure they are synchronised.
- Avoid using strobes for periods longer than 20 seconds at a time.
- If strobes are in use and someone has a seizure, switch the strobes off immediately.
- Reduce the risk by mounting strobes as high above head height as practicable. Where possible the light from strobes should be bounced off walls or diffused by other means to reduce glare.
- Do not use theatrical strobes in corridors, on stairs, or near public egress exits.

References

Disco Lights and Flicker Sensitive Epilepsy, published by HELA (UK), November 2000
A Guide for Safe Working Practices in the New Zealand Theatre Industry, draft revision 9, May 2003
Safety Guidelines for the Entertainment Industry, published by AEIA and MEAA (Australia), August 2001
Backstage Technical Services Safety Guidelines, published by University of Bath Student's Union (UK), August 2000