

**WELDING AND OTHER ELECTRIC ARCS - ALLEGED HAZARD  
TO WEARERS OF CONTACT LENSES**

1 This document contains internal guidance which has been made available to the public. The guidance is considered good practice but is not compulsory. You may find it useful in deciding what you need to do to comply with the law. However, the guidance may not be directly applicable in all circumstances and any queries should be directed to the appropriate enforcing authority.

2 Over a number of years, articles have appeared in the press of several countries alleging that microwave (and in some versions of the story ultra violet) energy from electrical discharges, eg welding arcs, has heated contact lenses sufficiently to dry out the tear film between the lens and the surface of the eye causing the lens to adhere. It is further alleged that subsequent removal of the contact lens has caused severe damage to the cornea of the eye.

3 There is no substance to these allegations. Contact lens do not focus light or microwave radiation onto the cornea. Further, arcs do not generate enough microwave energy to cause significant heating of a contact lens or the eye.

4 It is possible, however, that if a wearer of contact lenses were to sustain a flash burn ('arc-eye'), the lenses might give rise to additional irritation. A sensible precaution would be for the wearer, if his or her eyes started to become painful after exposure to flash, to remove the lenses immediately and not to replace them until the irritation has subsided.

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