

To Safety Co-ordinators (for onward transmission to Heads of School/Directorates, School Safety Advisors, Safety Representatives, persons responsible for portable appliance testing)

From Dr Melanie Taylor, University Safety Advisor

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Distribution Dr S A Robson, Mr T Humphreys, Mr M Bailey, Mr B Gleave

Reference Circular 2/2006

Electric shock accident - Dimplex convection heater

In December 2005, an employee in the Stopford Building received an electric shock from a Dimplex convection heater. Fortunately, no permanent injury was sustained.

The incident has been fully investigated. It appears that a fault within a built-in timer unit (identified after the incident as a loose internal live connection) led to intermittent and erratic operation. On this occasion, the loose terminal probably made contact with one of the other internal terminals, emitting an electrical spark around one of the push buttons as the operator touched it. The operator's other hand was resting on top of the metal heater, and the electric spark was earthed through the operator's body.

All initial portable appliance tests were satisfactory, and the problem of a loosely connected live terminal inside the timer only became apparent when the timer was de-coupled from the appliance.

Recommended actions:

- Any similar heating appliances displaying intermittent or erratic operation should be taken out of use immediately, for full electrical examination and testing.
- Although not the case here, staff should be discouraged from bringing in their own domestic heating appliances. Any problems about local heating should be reported to Estates.
- If purchase of heaters is considered as an interim measure, those with in-built timers should be avoided, as these are difficult to test (because the timer can prevent mains components being connected during testing, giving rise to a false indication of safety). Purchase of separate heater and stand-alone mains timer would remove this problem.

Further advice and information from Mike Bailey (michael.bailey@manchester.ac.uk), or Barry Gleave (barry.gleave@manchester.ac.uk)

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